

2014

Reynolds Bath House

Amy Turnage

Virginia Commonwealth University

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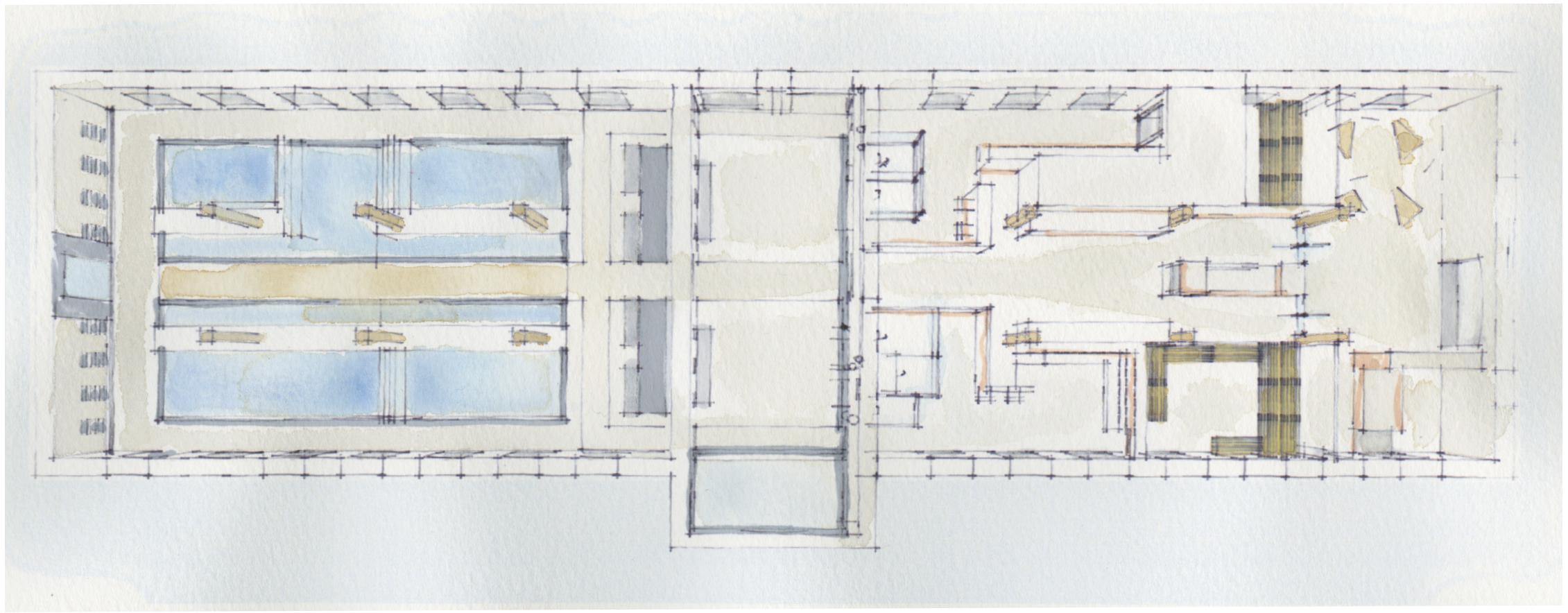
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AMY TURNAGE

THESIS: REYNOLDS BATH HOUSE: RITUAL, PROCESSION, REBIRTH

Much gratitude and love
for too many family + friends to name
for your constant support
This work is dedicated to you



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AUTOBIOGRAPHY



I was born and
raised on the
Hampton Harbor in
Tidewater Virginia.
The rhythm of
the waves of the
Chesapeake Bay
crashing against the
shore is as much a
part of my makeup
as my heartbeat.
No matter where I find
myself, I am drawn
to the water's edge,
whether it is the
crashing waves
of the ocean,
the still reflection
of a quiet lake,
the gurgle of a
shallow creek,
or the white roaring
froth of a river's rapids

ABSTRACT

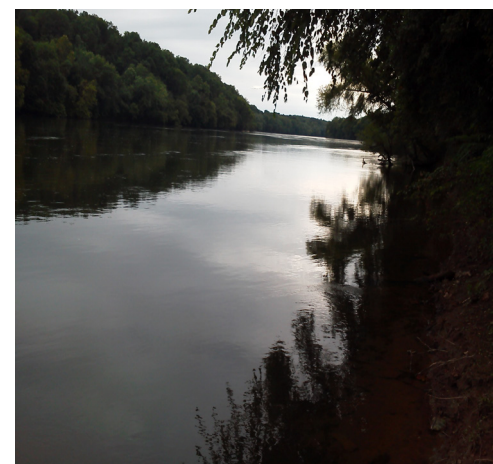


THESIS: PUBLIC BATH HOUSE

This project explores
the ritual of leisure,
social interaction,
and reflection in a
democratic* space.
Water is the universal
experience. The
program for this site
examines the ritual
of bathing and the
role of intimacy within
a public domain.

*democratic: absence
of hereditary or
arbitrary class
distinctions or
privileges

MANIFESTO



"I long, as does every human being, to
be at home wherever I find myself."

-Maya Angelou

DESIGN: A SPACE TO DWELL

Interior design is an invitation to live, an invitation to linger, to dwell. Beyond merely living, interior design invites introspection and self-replenishment. A dwelling offers refuge, reflection, even rest. With life becoming more task and production oriented, undertaken at higher and higher speeds, interior design must provide places of reflection, contemplation, and dwelling.

CONCEPT



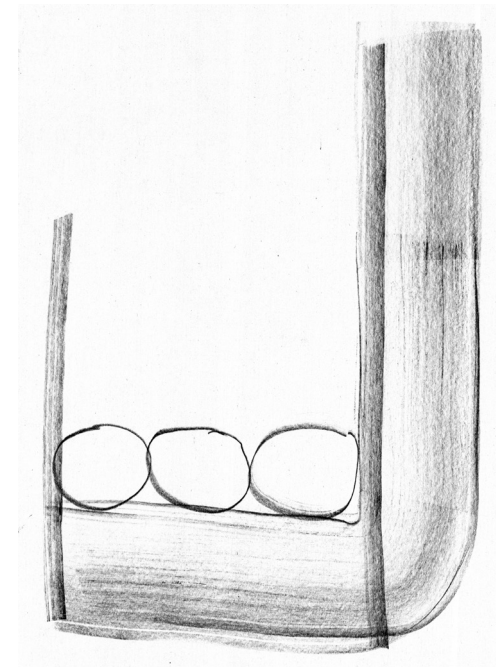
Water is central to the human experience; from basic survival, to religious ritual to daily routine. Immersed in water, we are stripped of conformities and made vulnerable. Water is the most abundant element, simultaneously destructive yet life sustaining. Immersion fascinates and invigorates - our potential for rebirth.

THESIS GOALS

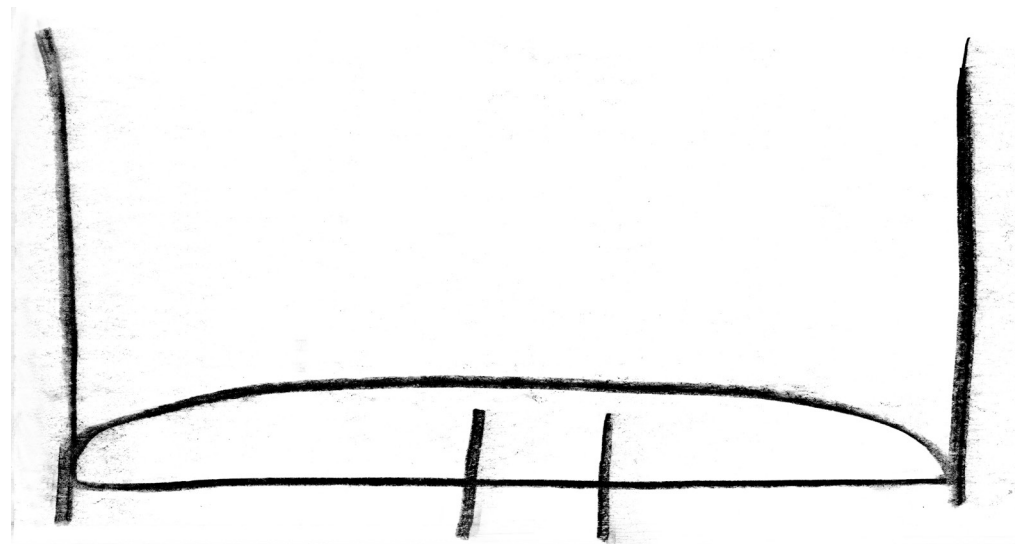
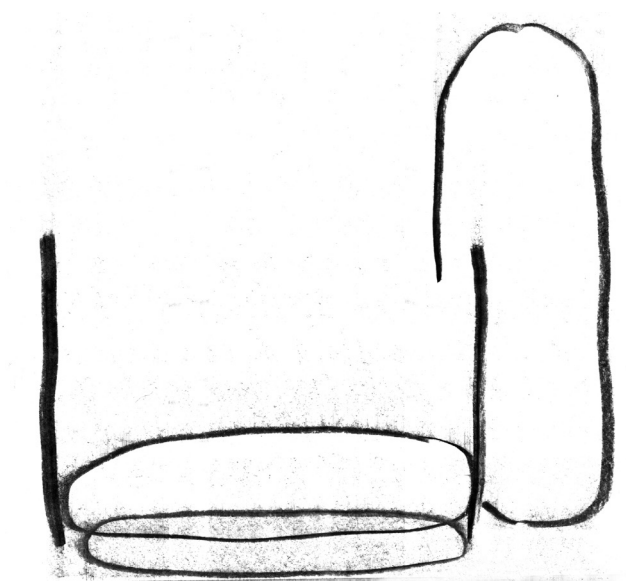


This project strives to be more than a public bath. The goals of this thesis are to create a space that disarms, a space that dissolves barriers, that simultaneously allows for introspection yet promotes interaction and empathy. This space will allow for an awakening of the senses, a rejuvenation, an opening of the heart and mind, it must allow for the potential of rebirth.

PROJECT STATEMENT



Utilizing the 28,800 square-feet of the R.J. Reynolds building located along the canal in Richmond, Virginia, I will create a public bath-house. The focus of the program will be on the first level of the Italianate building. Areas of concentration will include entry, tea room, changing rooms, saunas, shower hall, and bathing pools, with an emphasis on the ritual of bathing.



THESIS QUESTION

"We do not dwell because we have built;
we build and have built because we dwell."

-Heidegger

Where in an
historically and
culturally rich
city does a
person dwell, to
free oneself of
stereotypes, social
status and even
daily concerns?
This must be a
place free of
artifice, free of the
typical trappings of
daily life where both
interaction and
solitude have place
and significance.
How can an
environment blur
the lines of class,
race, public, and
private space, habit
and ritual, in order
to create moments
of unexpected
interaction?

RITUAL



RITUAL OR ROUTINE?

What separates ritual from routine? What makes a walkway a processional path? Special moments can transform the ordinary into the extraordinary. The key is the correct rhythm of ordinary and unexpected. Too many unique moments veil the special and make it ordinary again. Framed glimpses are often more provocative than revealing the whole picture at once. The element of mystery-leaving something to be discovered, the controlled unveiling, like a bride's first kiss, is what creates the ritual.

CONCEPT DEVELOPMENT



GOING FOR WATER

by Robert Frost

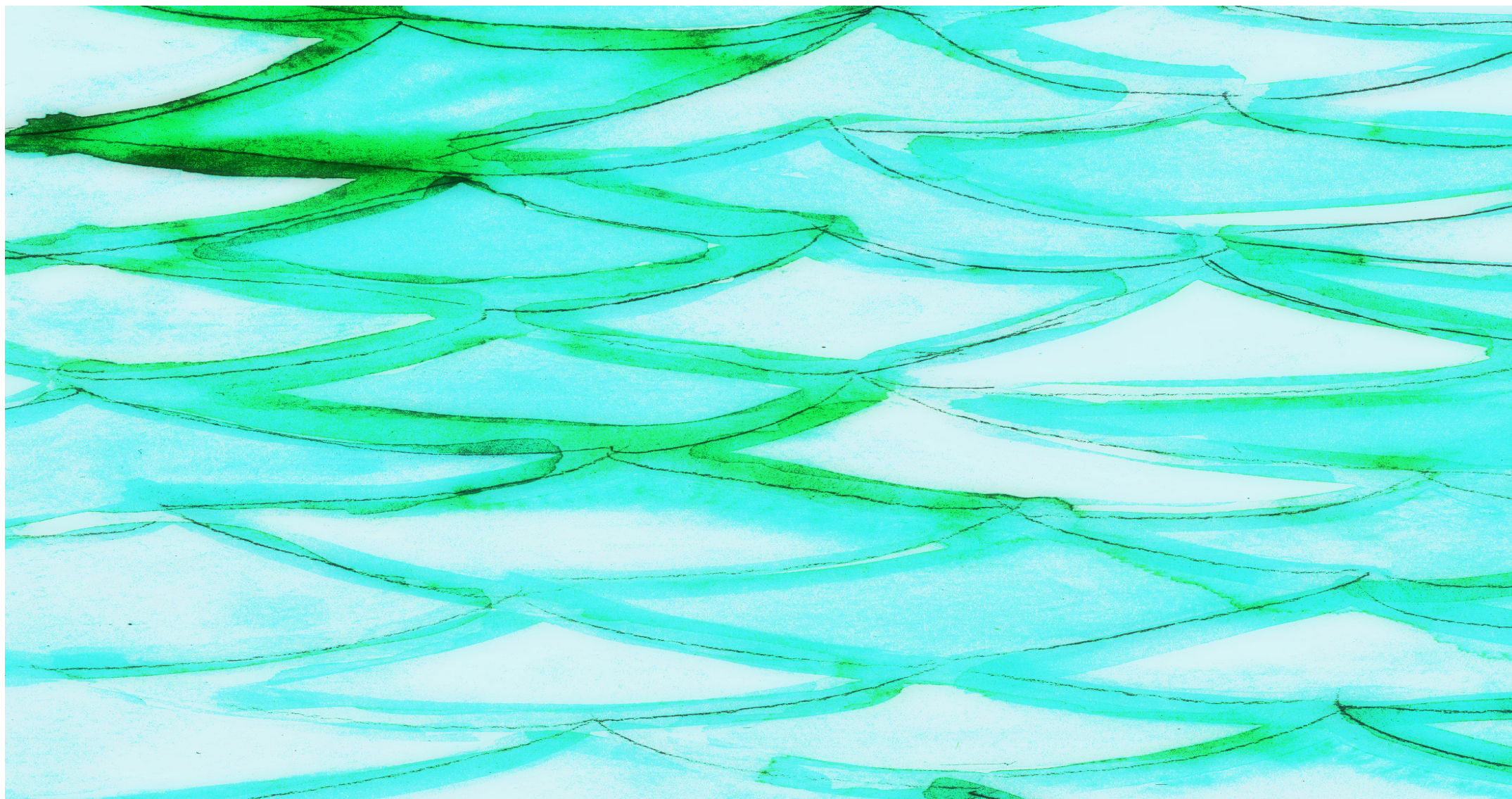
The well was dry beside the door,
And so we went with pail and can
Across the fields behind the house
To seek the brook if still it ran;
Not loth to have excuse to go,
Because the autumn eve was fair
(Though chill), because the fields were ours,
And by the brook our woods were there.
We ran as if to meet the moon
That slowly dawned behind the trees,
The barren boughs without the leaves,
Without the birds, without the breeze.
But once within the wood, we paused
Like gnomes that hid us from the moon,
Ready to run to hiding new
With laughter when she found us soon.
Each laid on other a staying hand
To listen ere we dared to look,
And in the hush we joined to make
We heard, we knew we heard the brook.
A note as from a single place,
A slender tinkling fall that made
Now drops that floated on the pool
Like pearls, and now a silver blade.



"Once in his life a man ought to concentrate
his mind upon the remembered earth.
He ought to give himself up
to a particular landscape in his experience;
to look at it from as many angles as he can,
to wonder upon it, and dwell upon it."

- N. Scott Momaday

Water. In its purest
form, it is free of
color, free of scent,
free of taste. Yet, it
awakens the senses.
It is in our bodies (our
blood is 80% water),
our sustenance,
our hydration. We
cleanse ourselves,
our clothing, our
tableware, -
everything with
water. Water is the
only element that
occurs naturally on
Earth as a vapor, a
liquid, and a solid.
Ice floats on water.
It covers about 70%
of our Earth. 97% of
water is salt water.
Water is a source of
travel, of exercise,
of leisure, of conflict,
of profit. It can be
bountiful or scarce,
treasured or taken
for granted. It is
the essence of life.
Perhaps this is why
we are so drawn to it.
My hope in this
project is to
celebrate the
human connection
to water, as a ritual
and a rebirth.



PROGRAM



Program

Tea + Lounging

Reception + Turnstiles

Robes + Towels

Changing + Lockers

Saunas

Showers

Mist, Spray, Waterfall, Pour, Rain, Splash

Baths

Plunge, Warm, Hot, Wade, Salt, Vortex

Pathways

Square Footage

700 SF

200 SF

300 SF

900 SF

400 SF

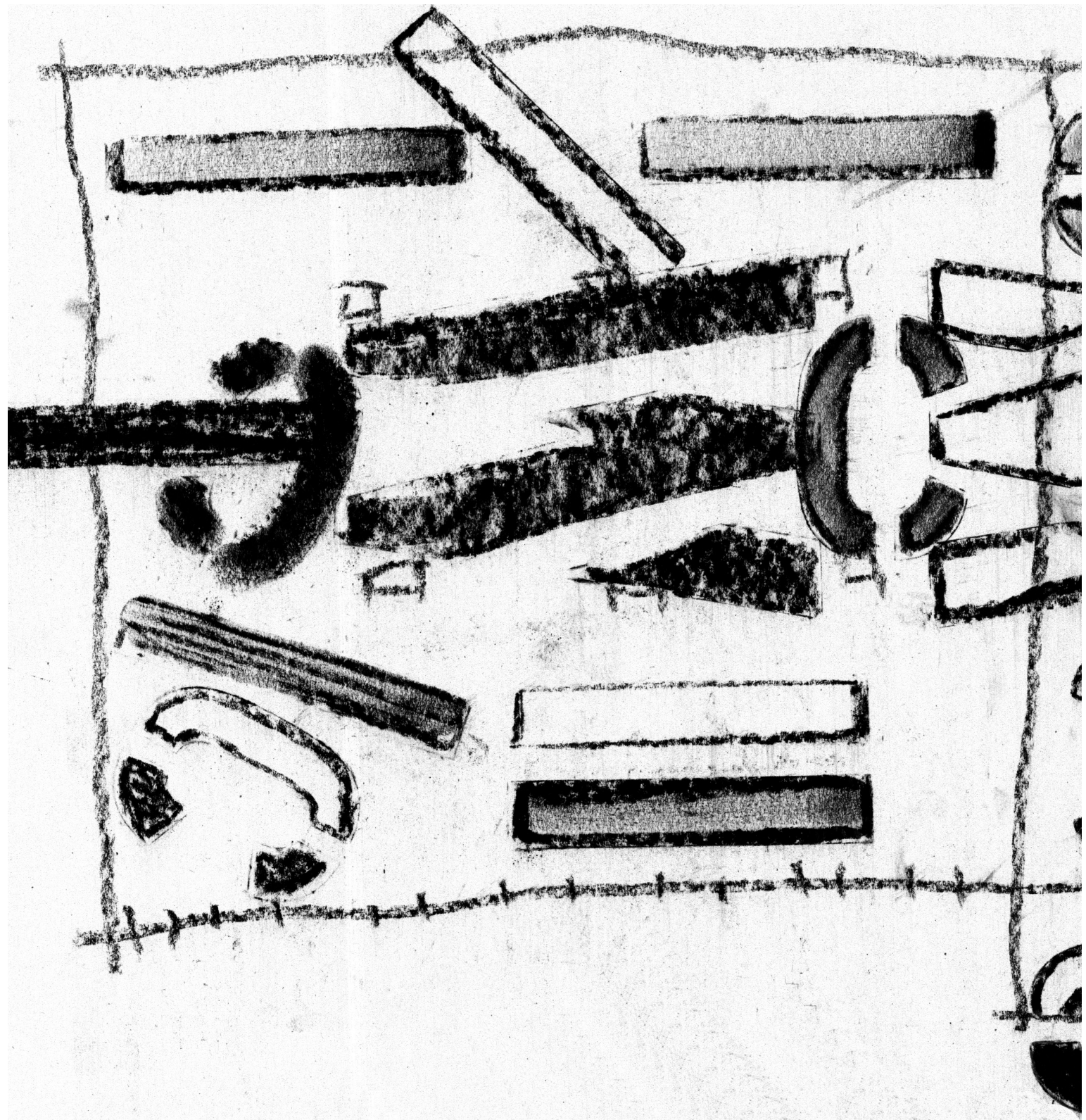
1800 SF

1500 SF

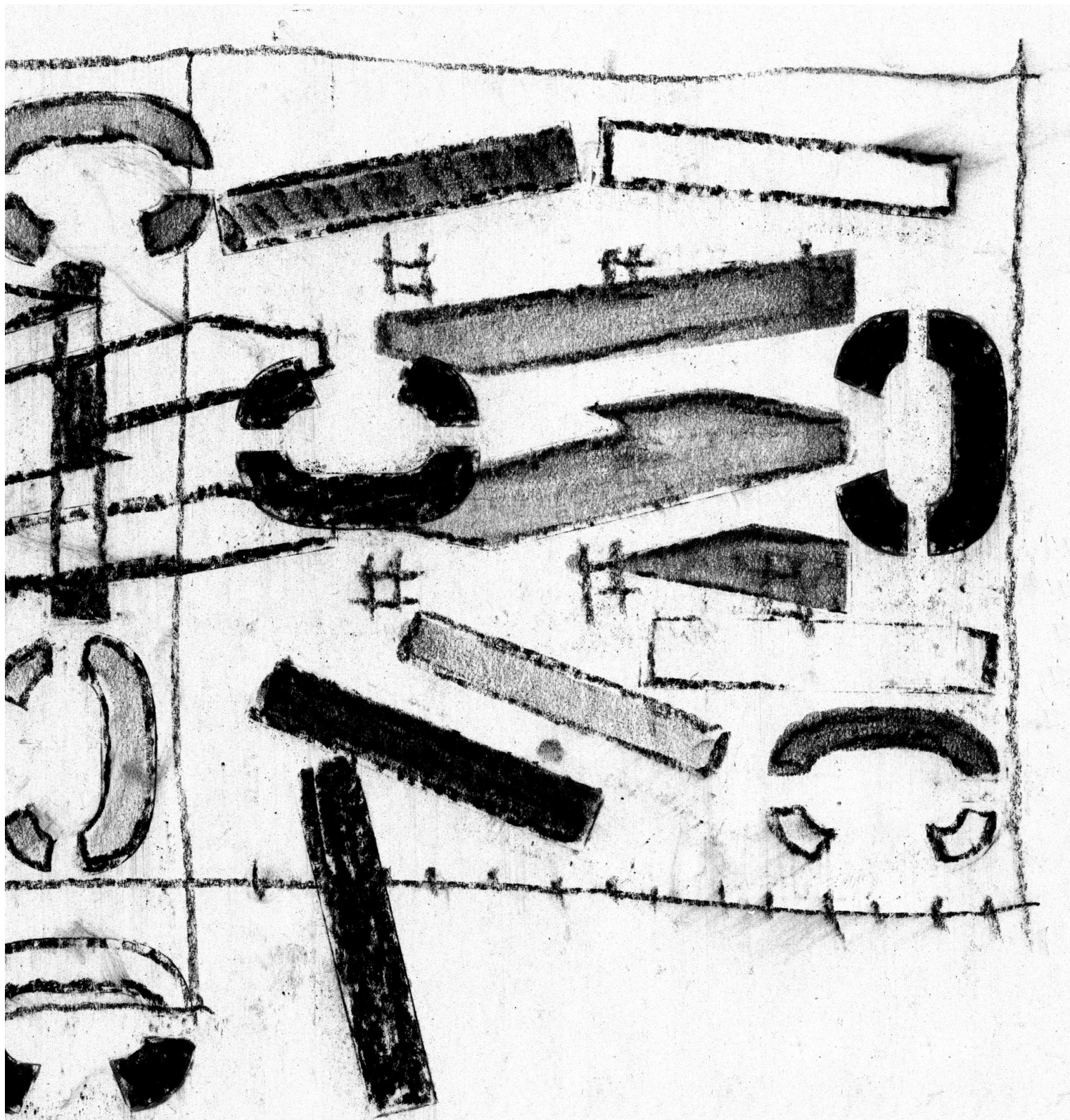
875 SF

6675 SF Total

current
temperature
sound
size
smell
tactility
color
taste
visibility
emotion
salinity
force
natural
man-made
shape
fluidity
reflectivity



PLAY



bath

shower

spa

pool

lake

brook

river

creek

marsh

ocean

water park

fountain

spring

rain

flood

mist

baptism

SPACE PLANNING INSPIRATION

BLOCK PLAN

Pools of various depths,
temperatures, shapes, and sizes
studied in a flow diagram.

PUBLIC BATHING

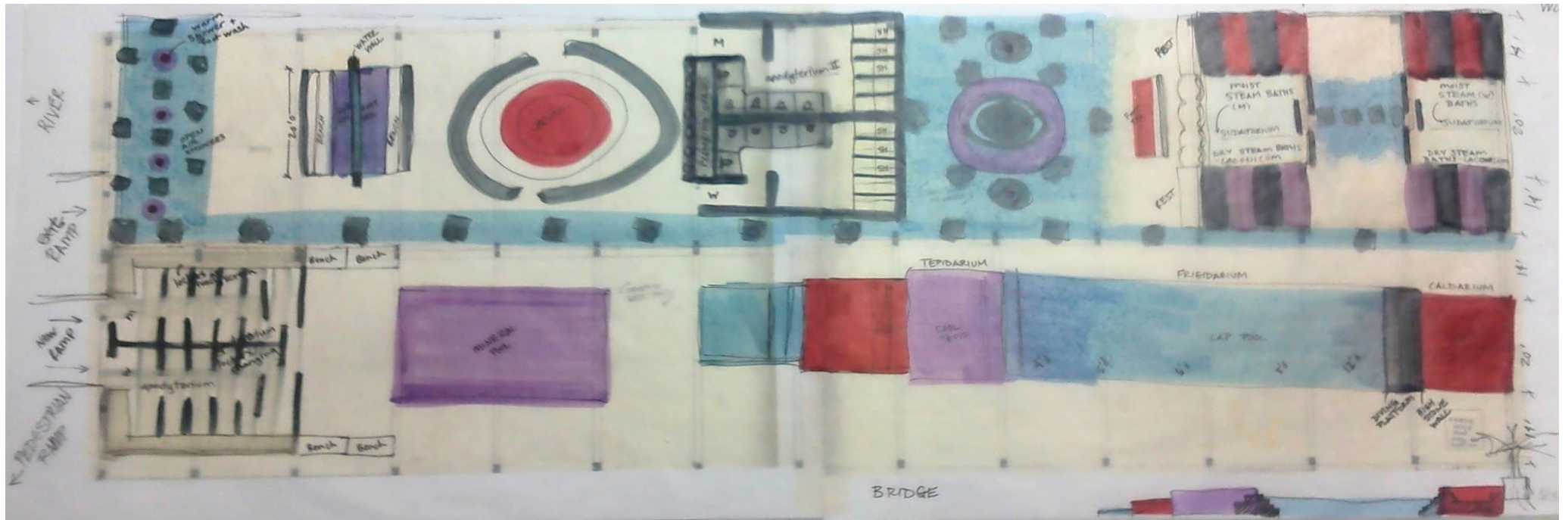
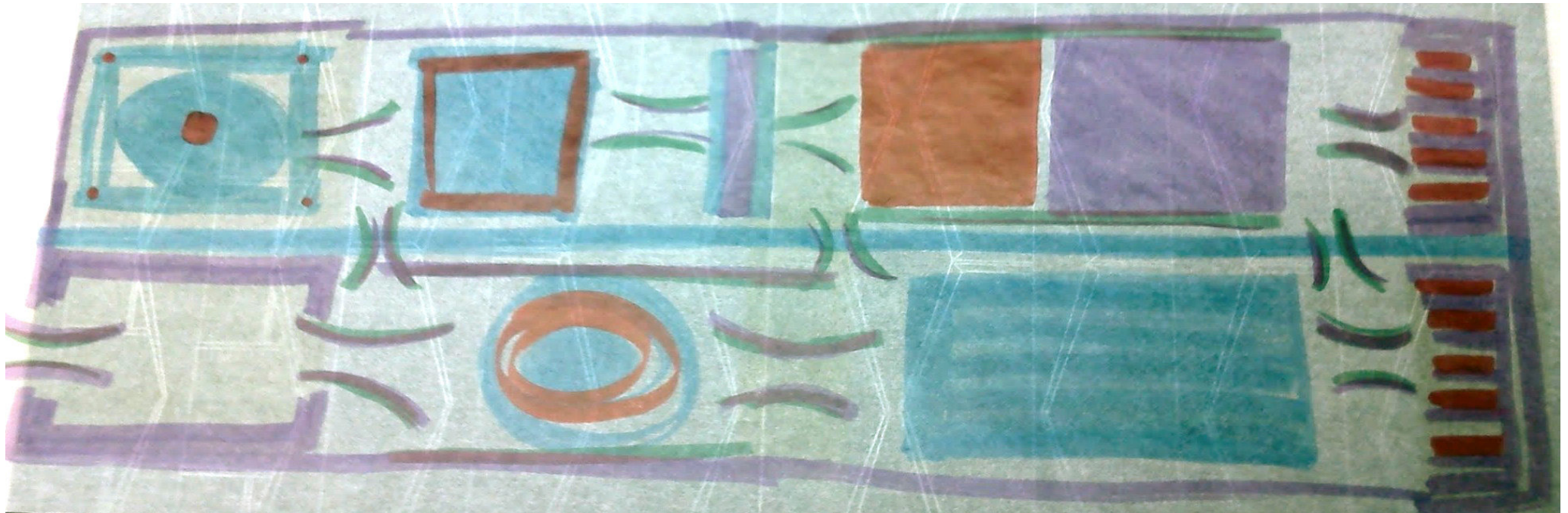
a private ritual in a public sphere
a place of gathering
of intimacy
of reflection
of rejuvenation
of ritual
of rebirth

SPACE PLAN SKETCH

Exploration of a sequence
of interactions with water
in various forms.

POOL TEMPERATURES





ritual

procession

light

entry

temperature

depth

flow

size

shape

materiality

democracy

socialization

community

interaction

submersion

access

comfort

PROGRAMMING INSPIRATION

LIFE
↓
WATER
MUD
SAND

Rock

CONTAINED

SOFT

JAGGED

SMOOTH

ROUGH

CRASH

STILL

RIPPLE

DROP

DRIP

POUR

WASH

LAP

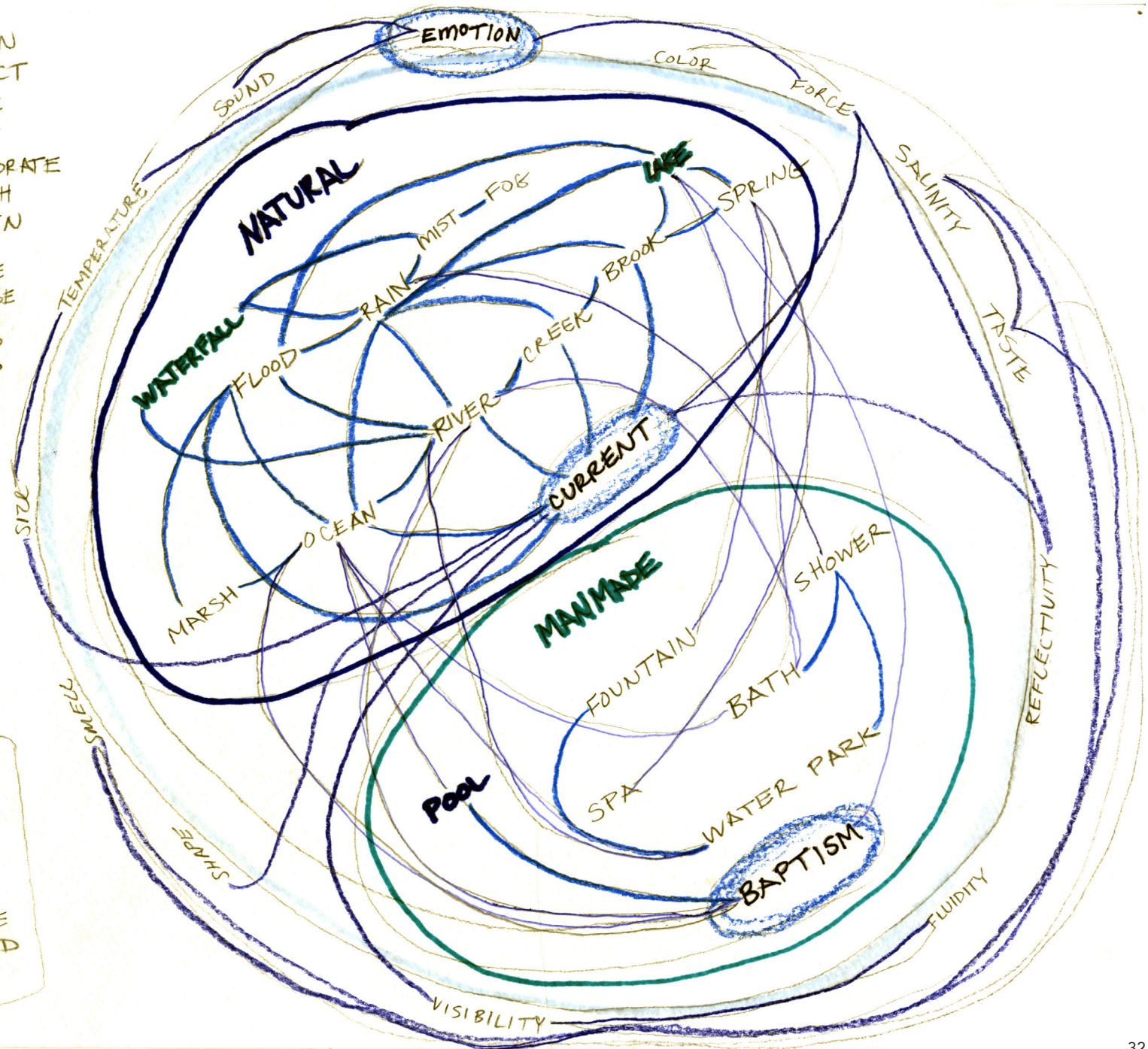
STAGNANT

FLOWING

VAST

AWAKEN
REFLECT
REVIVE
RELAX
REHYDRATE
QUENCH
SOFTEN
SCALD
SOOTHE
CLEANSE
CARESS
ENVELOP
SURROUND
SHOCK

FLOAT
SWIM
SINK
PLAY
SURF
BOB
BATHE
TREAD
SIT

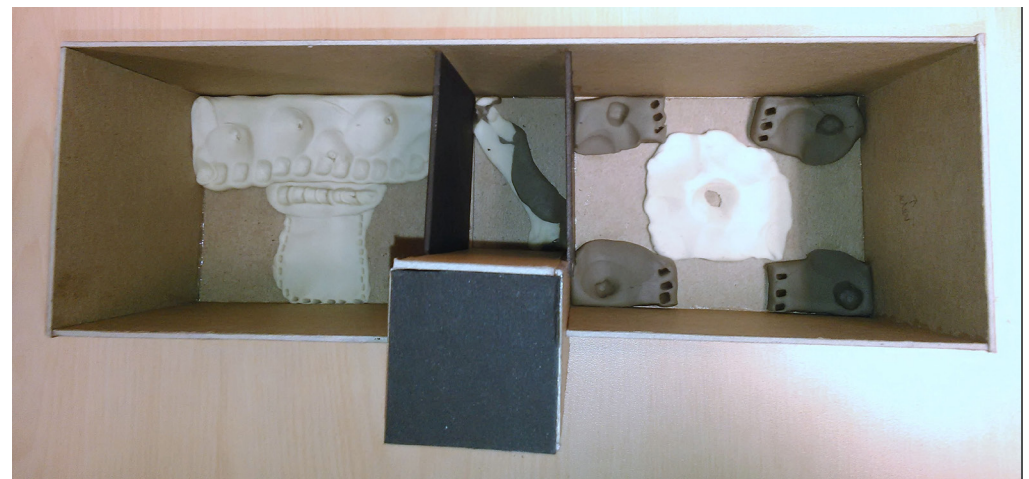


Exploration of
natural versus
man-made

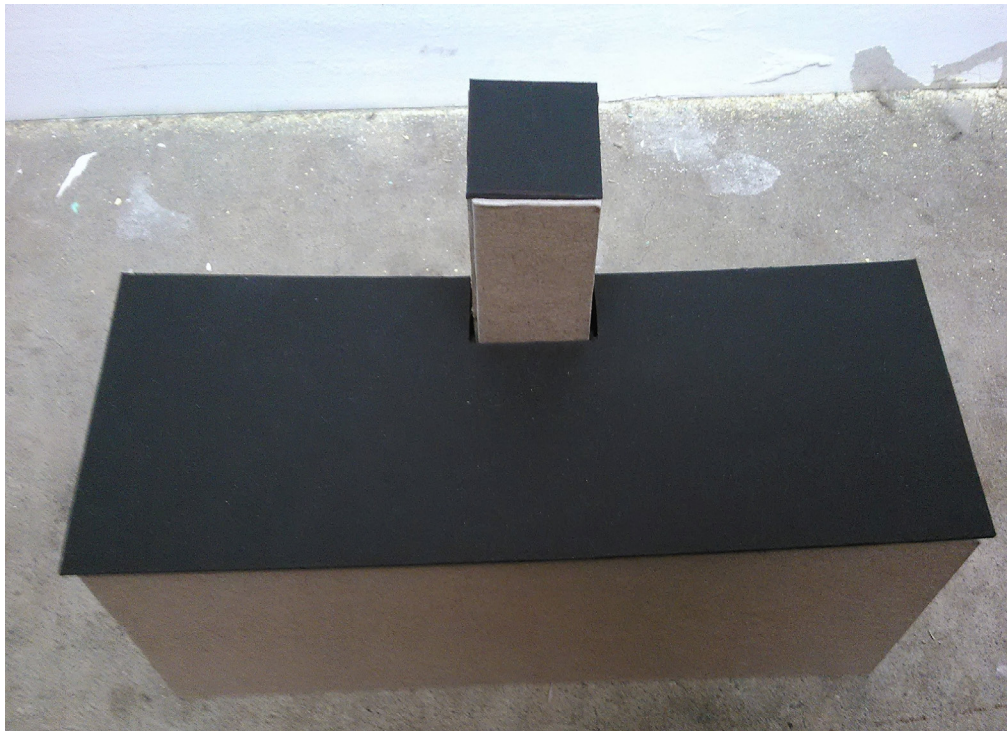
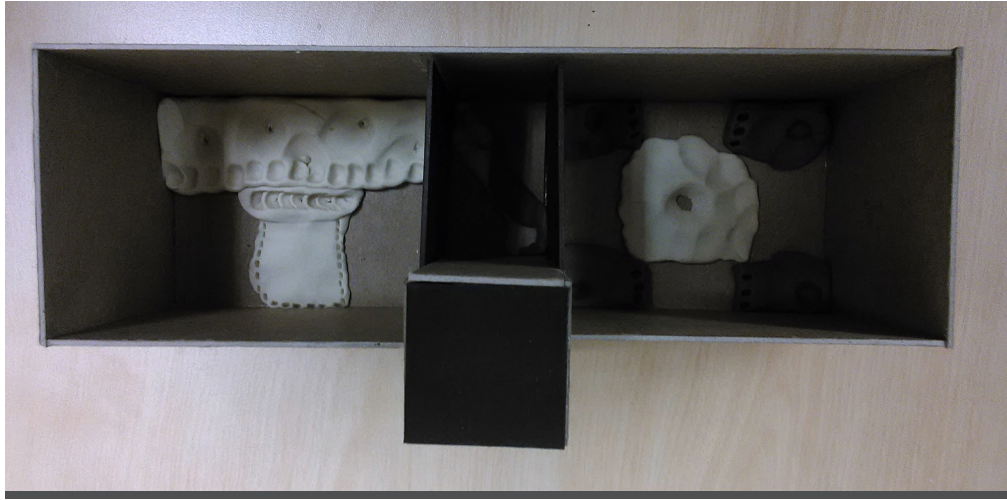


Black and brown
chip board
represent the
existing shell
of the building.

Grey and white
clay represent
the organic
nature of water.



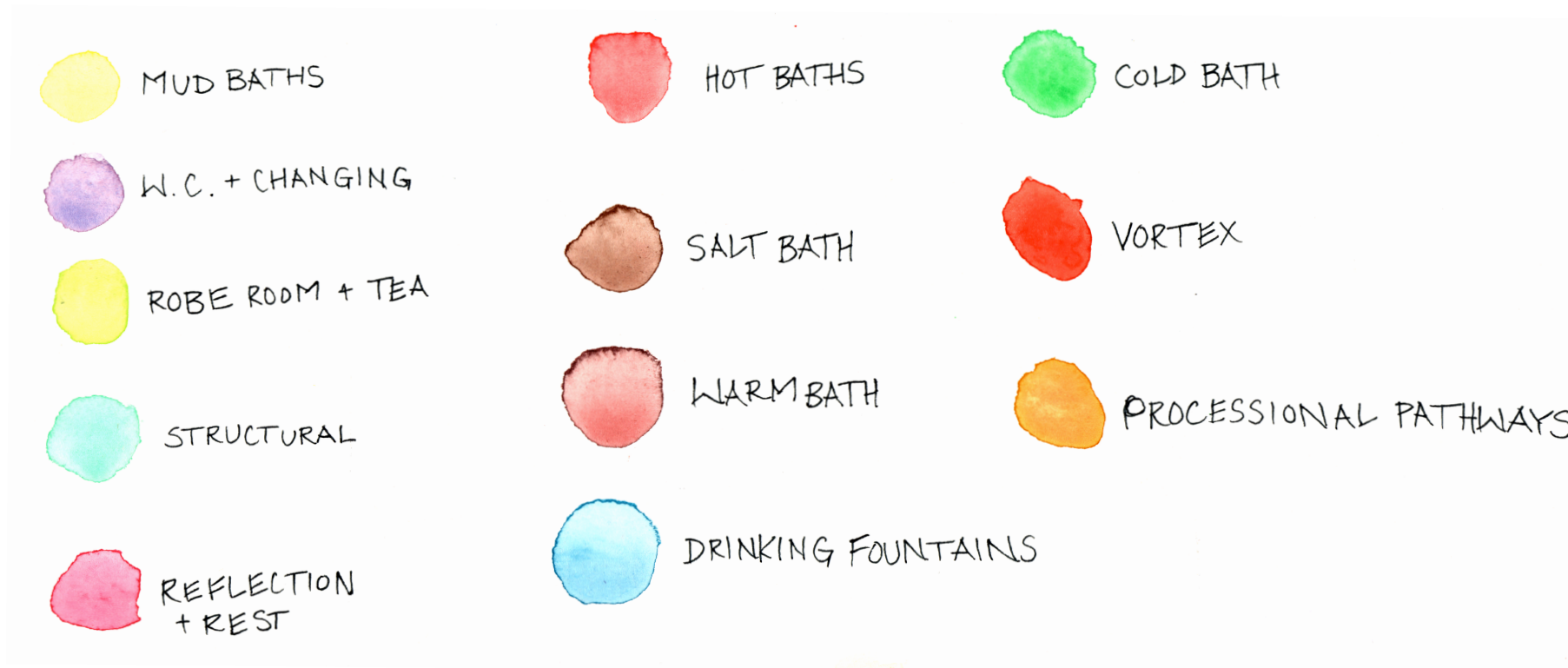
STUDY MODELS



This was an investigation of how man-made structure could interact with the natural element of water in a controlled yet fluid arrangement..

A watercolor study of how program interacts with the existing columns on the first floor.

Blocks represent columns, while colored lines represent the various aspects of program as indicated below.



COLUMN CONNECTION STUDY

Questions raised by watercolor study:

Can program intersect existing structure?

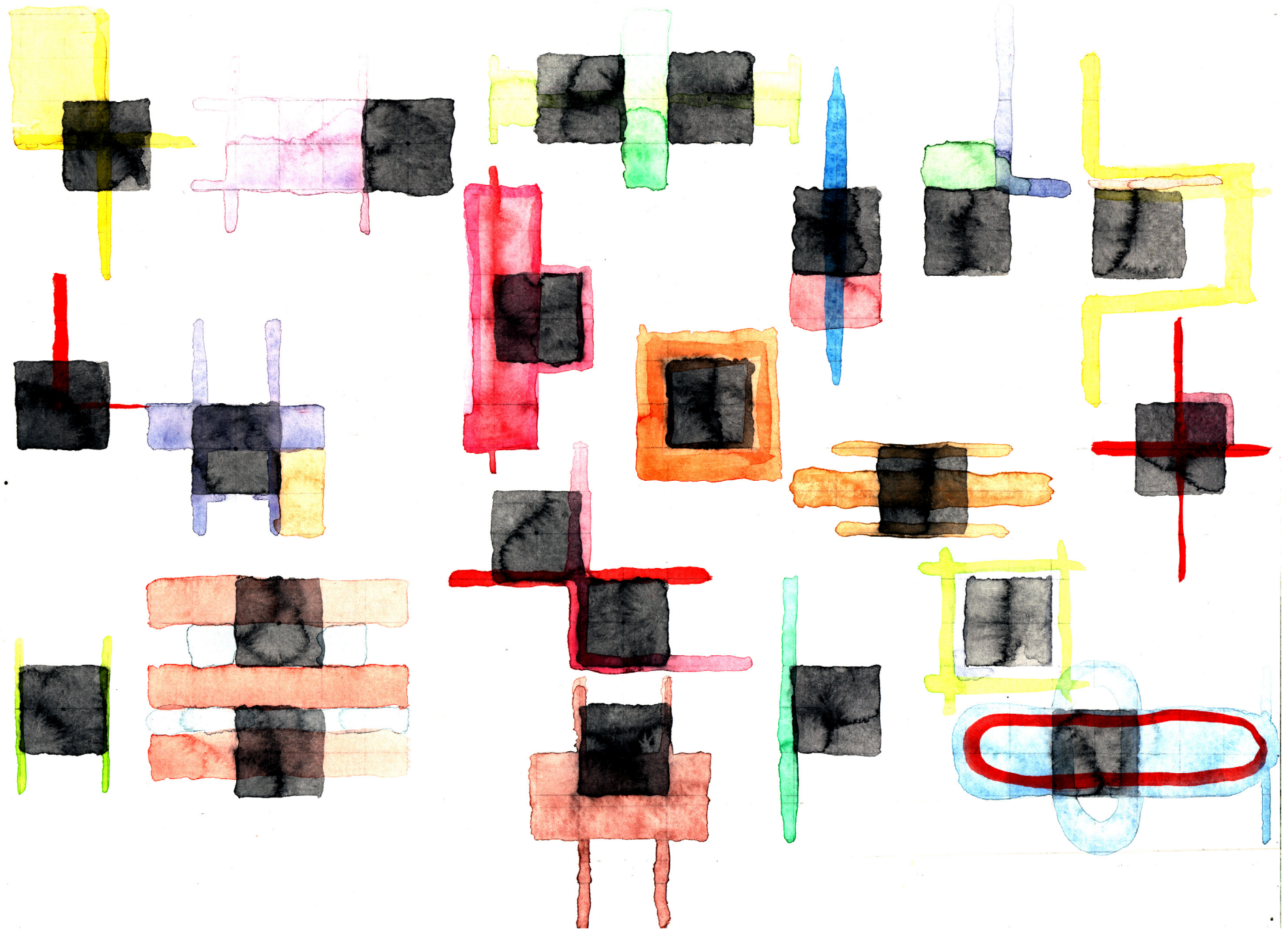
Can program envelop existing columns?

Can program interact with existing columns in ways that are not parallel or perpendicular to the column grid?

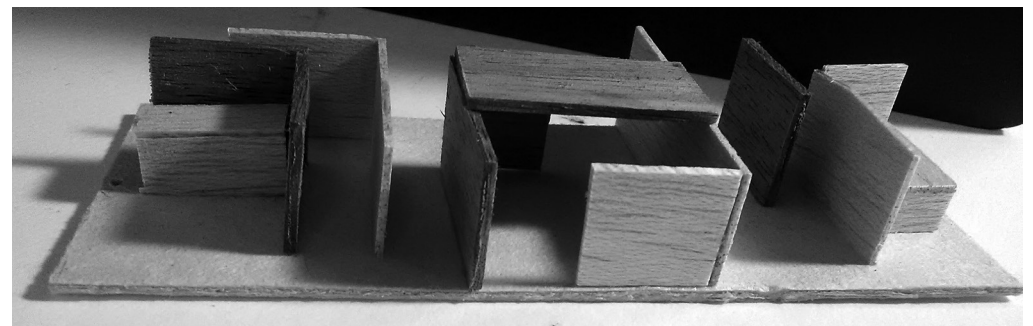
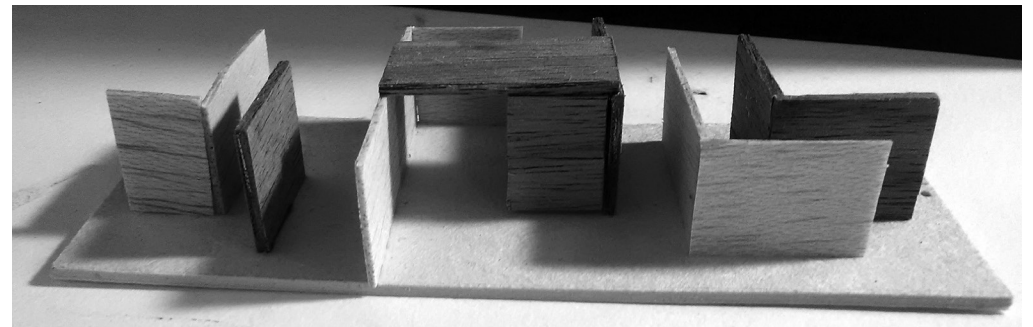
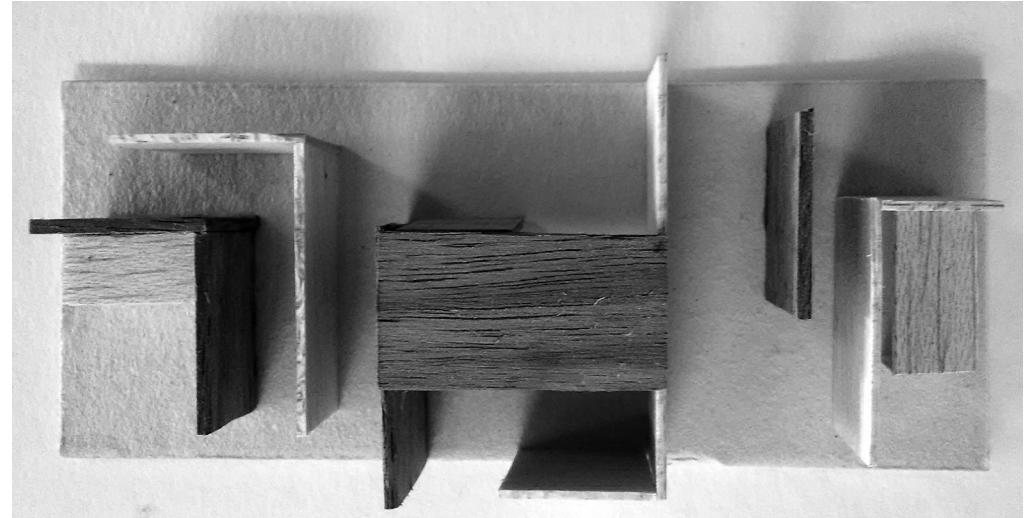
Can program touch existing columns, or should it be held off?

Does program touch columns lightly (thin line) or heavily (thick line)?

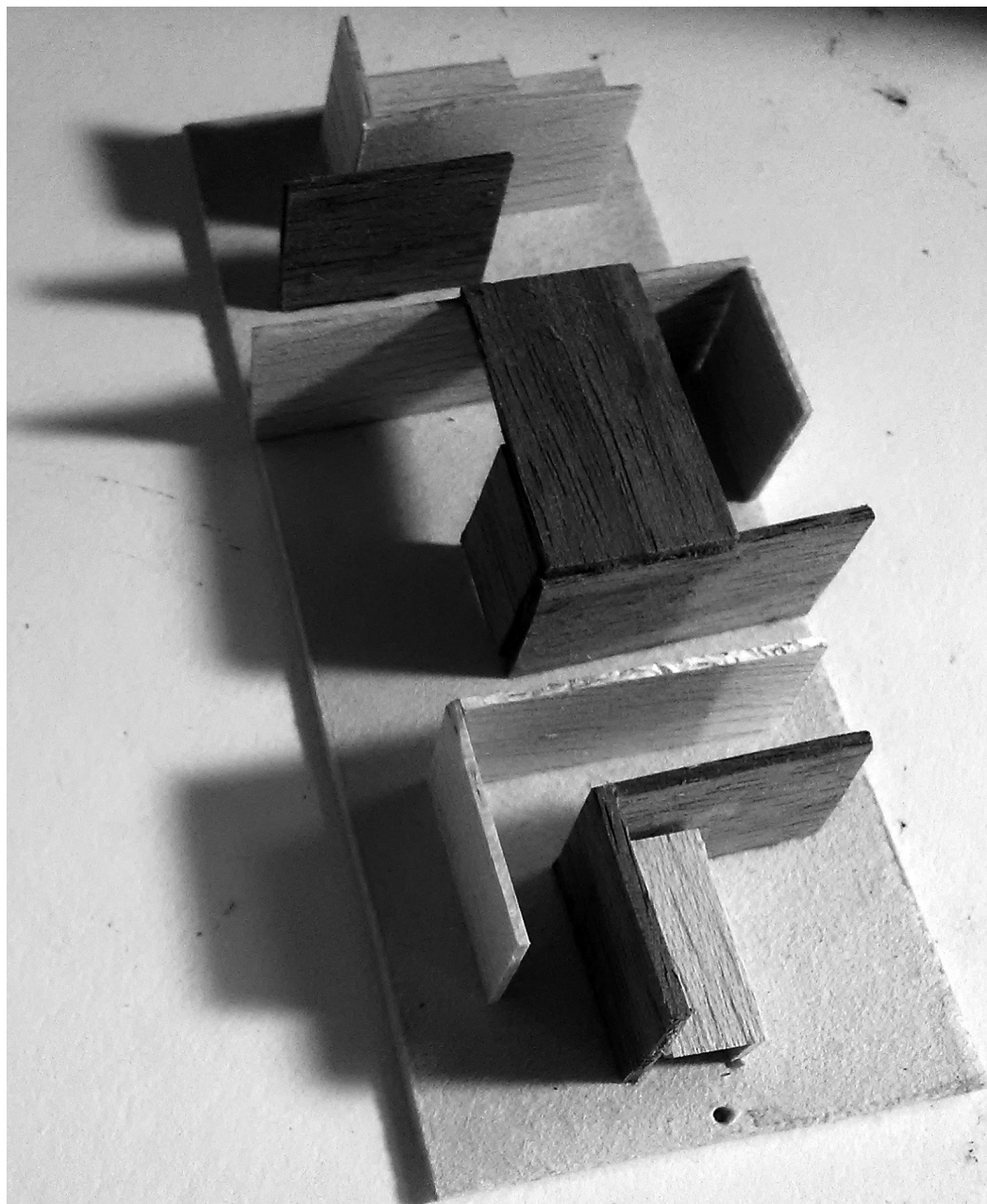
How many possibilities exist for interaction with existing columns?



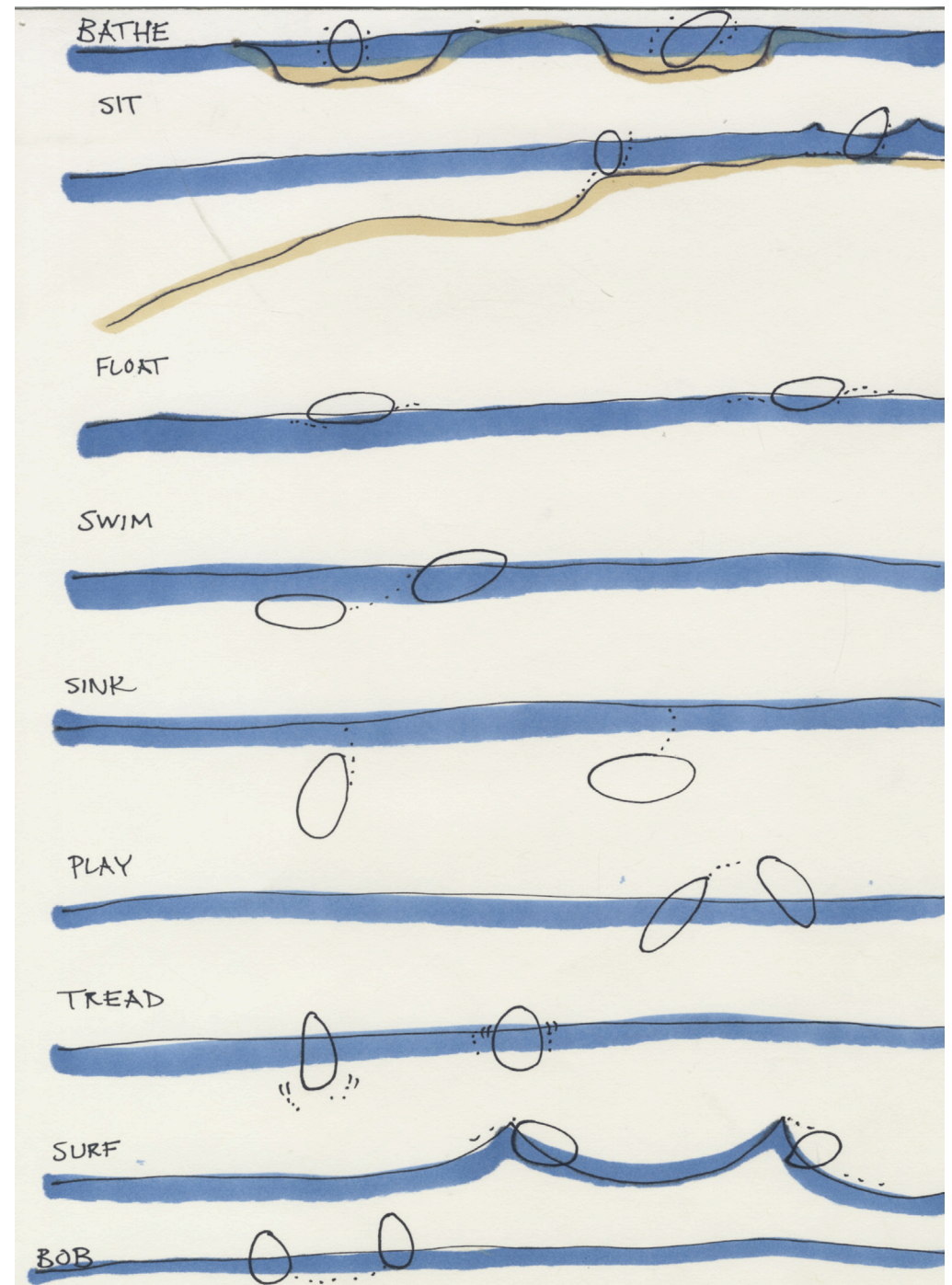
Exploration of
adjacencies



STUDY MODELS



This was an investigation of how adjacent structures could interact with one another to create intimate and public spaces in a controlled yet fluid arrangement..



CONSIDERATIONS + PARAMETERS

RHYTHM + PATTERN

Pattern, rhythm, overlap

EXTENSION OF MARGINS

Extension and overlap of margins
from one space into another

SUM OF PARTS

Sum of parts greater than the whole

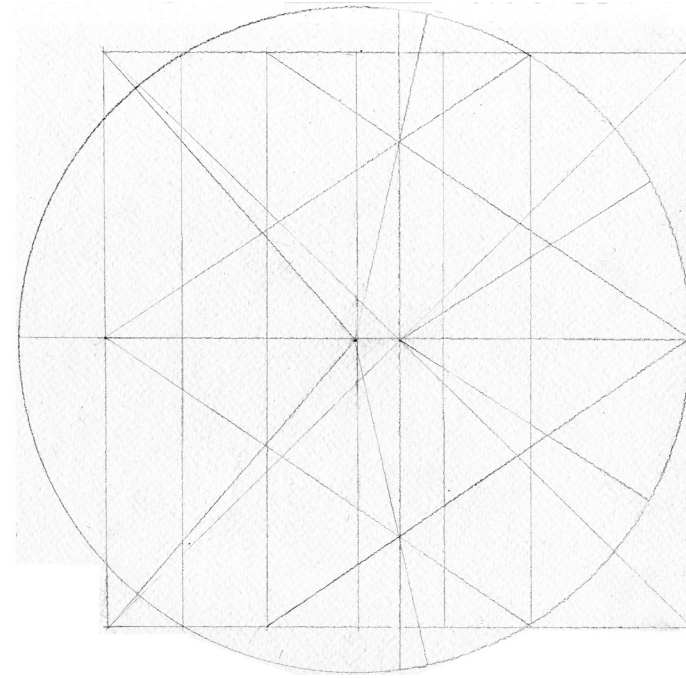
LIGHT + PATHWAYS

Use of light to define pathways + functions

MOMENT OF CONNECTION

Craft, the art of making, moment of connection

a study of
transparency
of proportions
of pattern
of adjacencies



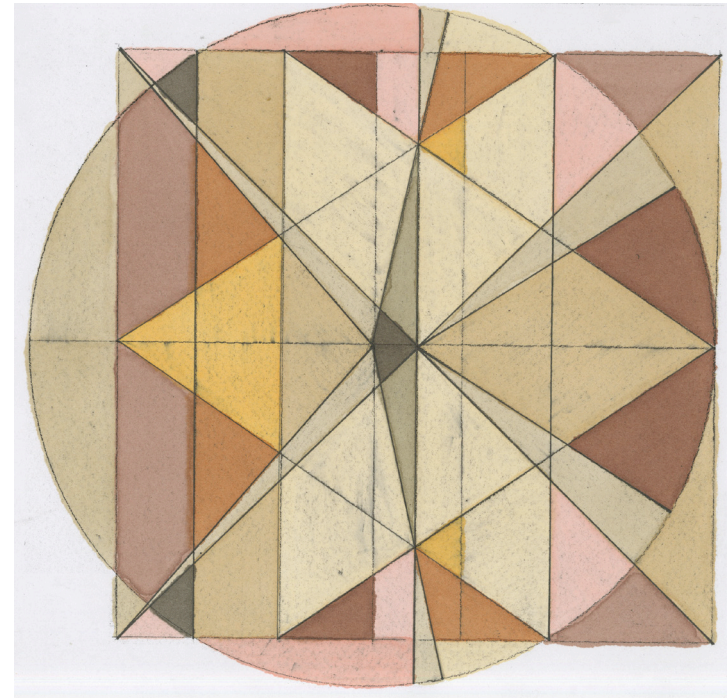
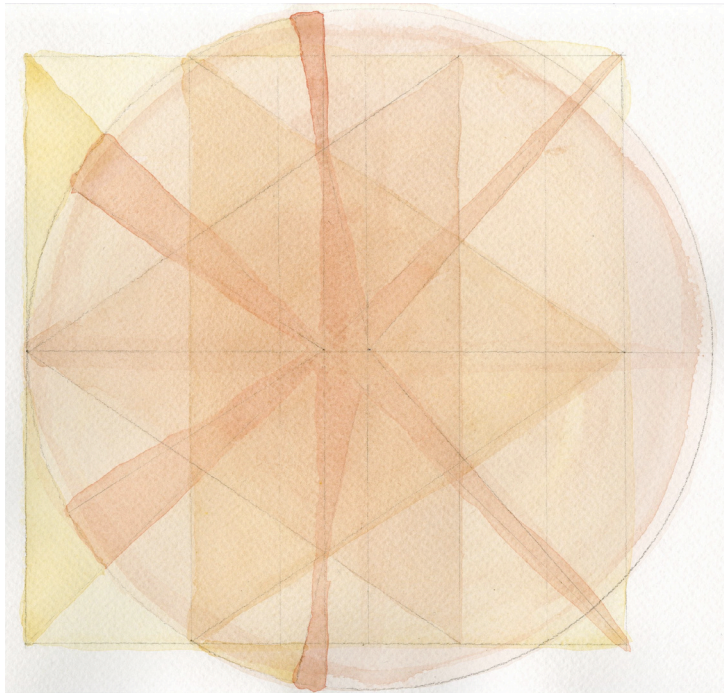
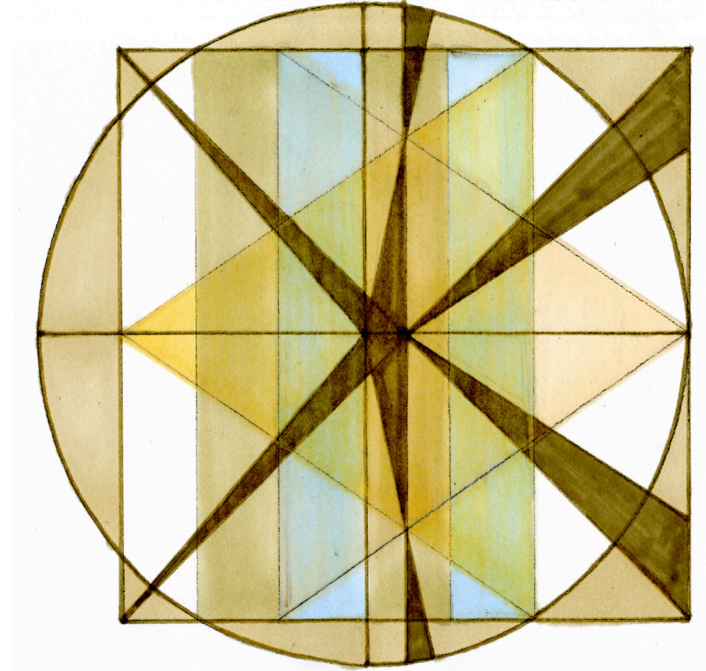
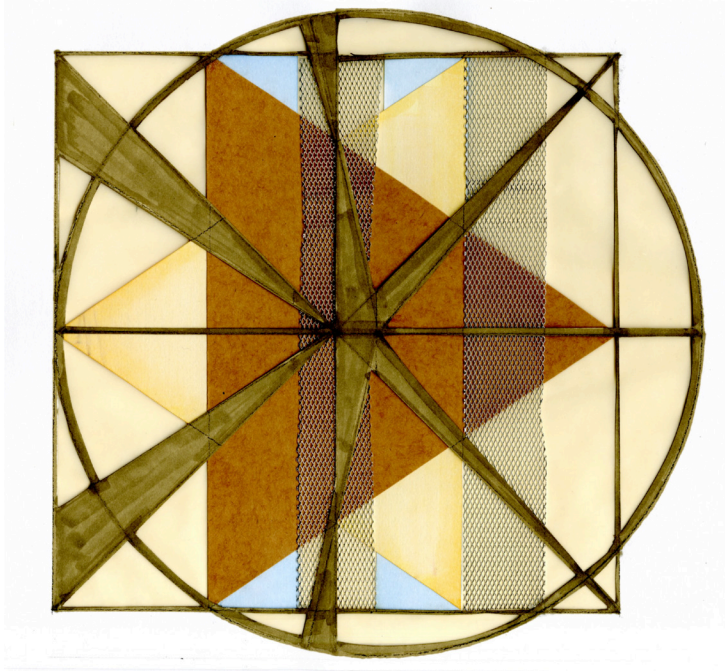
the public/private dichotomy

the line between
public + private
is constantly renegotiated
across regions
across cultures
across religions
between + within
political systems

the public/private distinction
always relies on context
the distinction is relative
to the context
to the individual

layers of privacy
are determined by
the individual
the social expectation
the situation
all of which are
random,
unpredictable,
+ always relative

PUBLIC VS. PRIVATE



SITE



Italianate Building

R.J. Reynolds
Tobacco Co.

320 South 12th
Street, Richmond,
Va 23219 at Haxall
Point: art wall across
the canal, adjacent
to Brown's Island.

This approximately
28,800 square foot
building was formerly
R. J. Reynolds
Tobacco Company
Leaf Tobacco
Warehouse, built
in the mid-1890's.
The 4-story building
(with a 5-story
central tower) has
a brick exterior with
the appearance of
a rusticated base,
which contrasts in
texture with the
smoothly finished
brick quoins
(masonry blocks at
the corners of the
walls) and pilasters,
giving the building
visual weight. There
are 15 bays, with 7
mirrored on either
side of the central
5-story tower.
The low hipped
roof is supported
by brackets.

Italianate Building at sunset
1



SITE INSPIRATION

THE FALLS OF THE JAMES

"Green, smooth, and wide,
the river usually glides sleepily;
but as if given a sudden push,
she breaks into a run
toward...the Falls.

The Falls forms a staircase
that has blocked
natural river traffic ever since
man found his way to the river.

In the seven miles
that compose the Falls,
which begins approximately
two hundred twenty miles
below the river's headwaters,
the river tumbles down
about fifteen feet per mile
in a confused and whirling manner."

-David D. Ryan, the falls of the JAMES, 1975

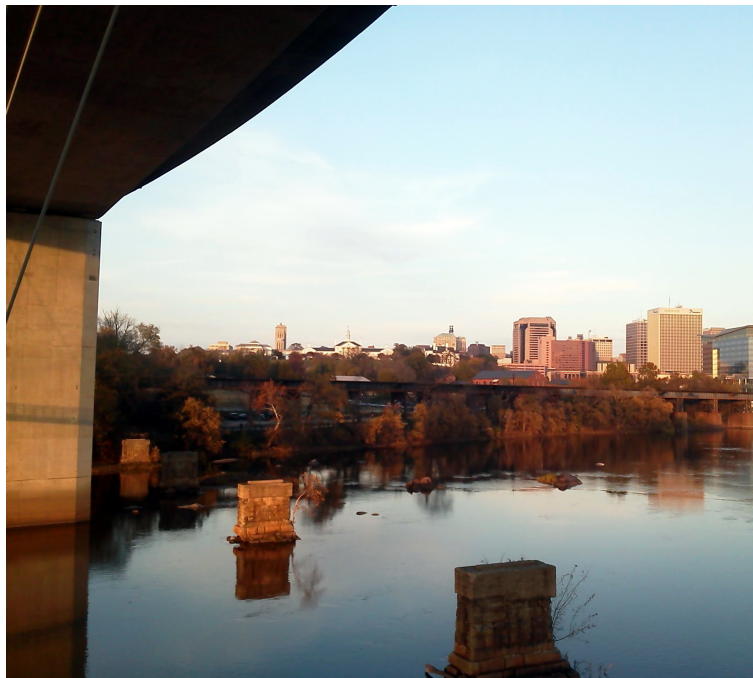
RICHMOND RIVERFRONT

Fair river! in thy bright, clear flow
Of crystal, wandering water,
Thou art an emblem of the glow
Of beauty-the unhidden heart-
The playful maziness of art
In old Alberto's daughter;
But when within thy wave she looks-
Which glistens then, and trembles-
Why, then, the prettiest of brooks
Her worshiper resembles;
For in his heart, as in thy stream,
Her image deeply lies-
His heart which trembles at the beam
Of her soul-searching eyes.

To The River-Edgar Allan Poe, 1829



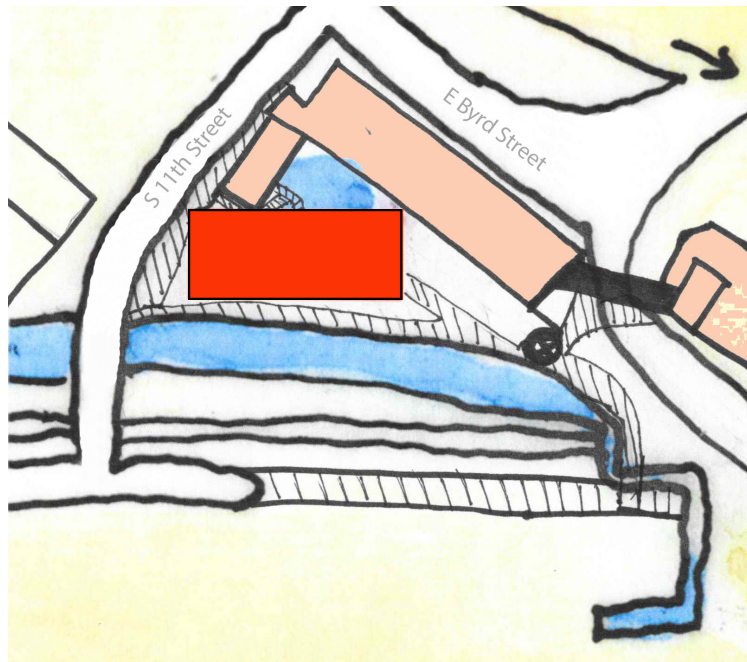
Pedestrian suspension
bridge to Belle Isle



Old bridge ruins at Belle Isle



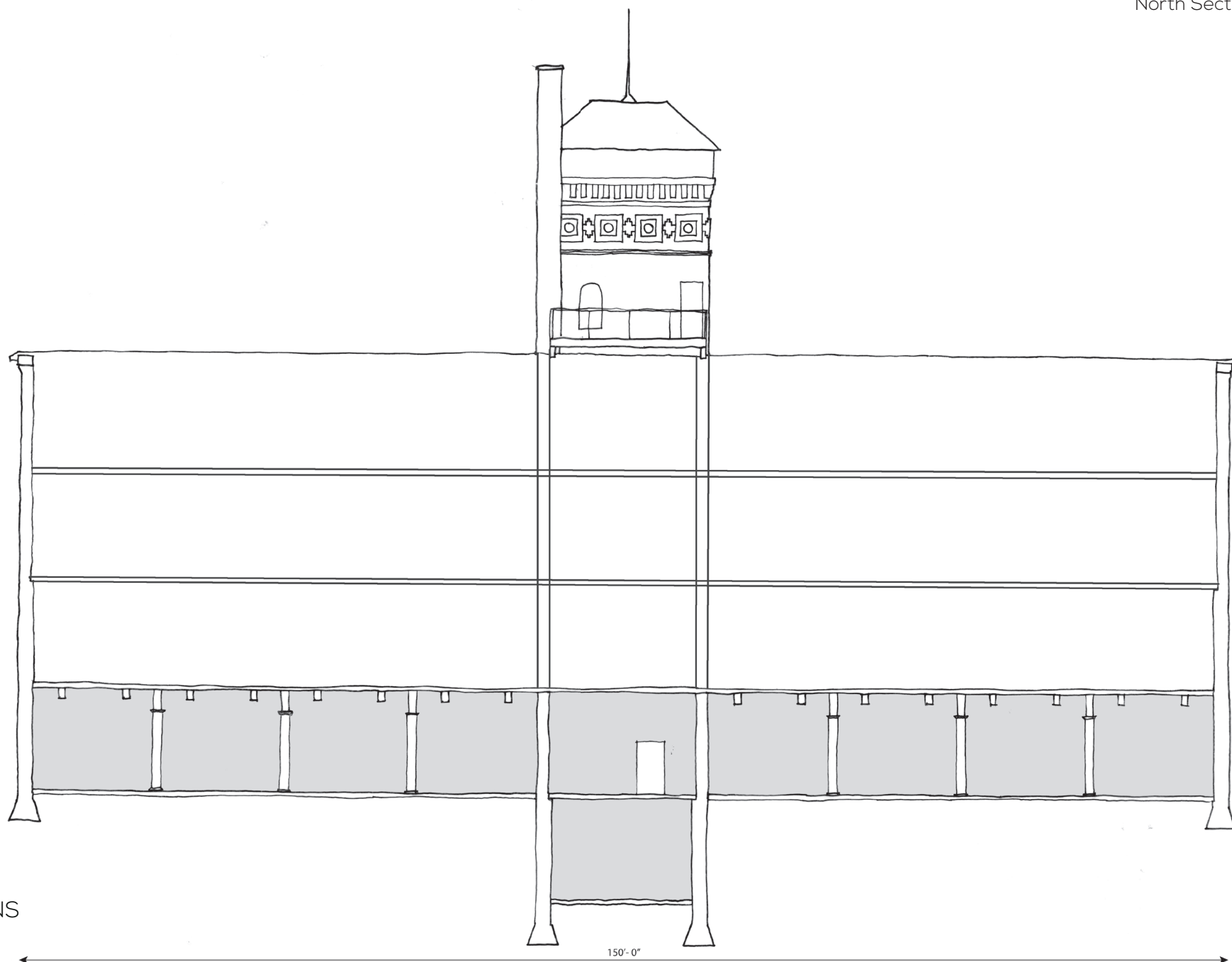
The site I selected for my thesis is significant because of its relationship to both the James River and the Canal. The juxtaposition of the man-made canal alongside the natural river inspired my program choice as well as my overall space plan and design concept. Water is a universal experience, the sustainer of life. It is a powerful element to contain within the boundaries of human design.



SITE MAP

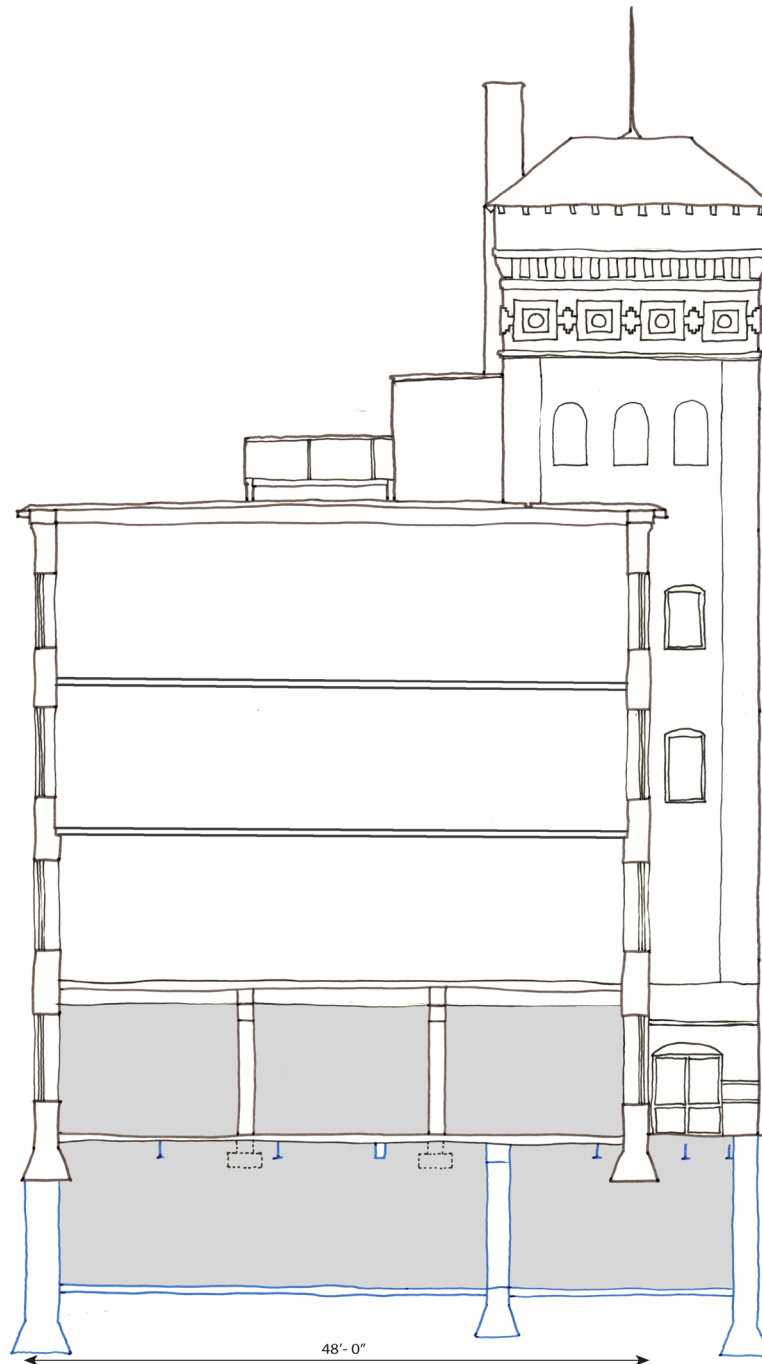


North Section

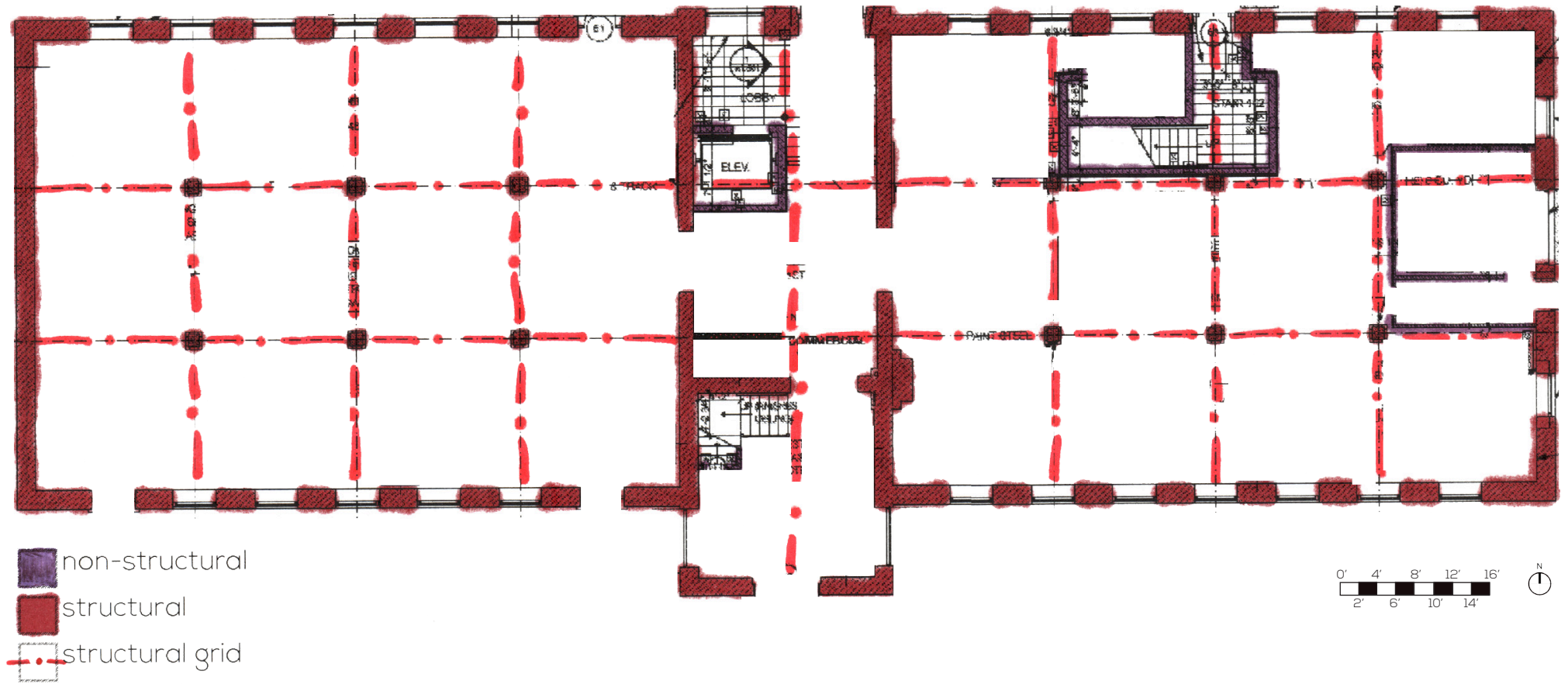


EXISTING SECTIONS

West Section



Shaded gray
indicates area
of focus for
thesis program
- first floor and
basement.

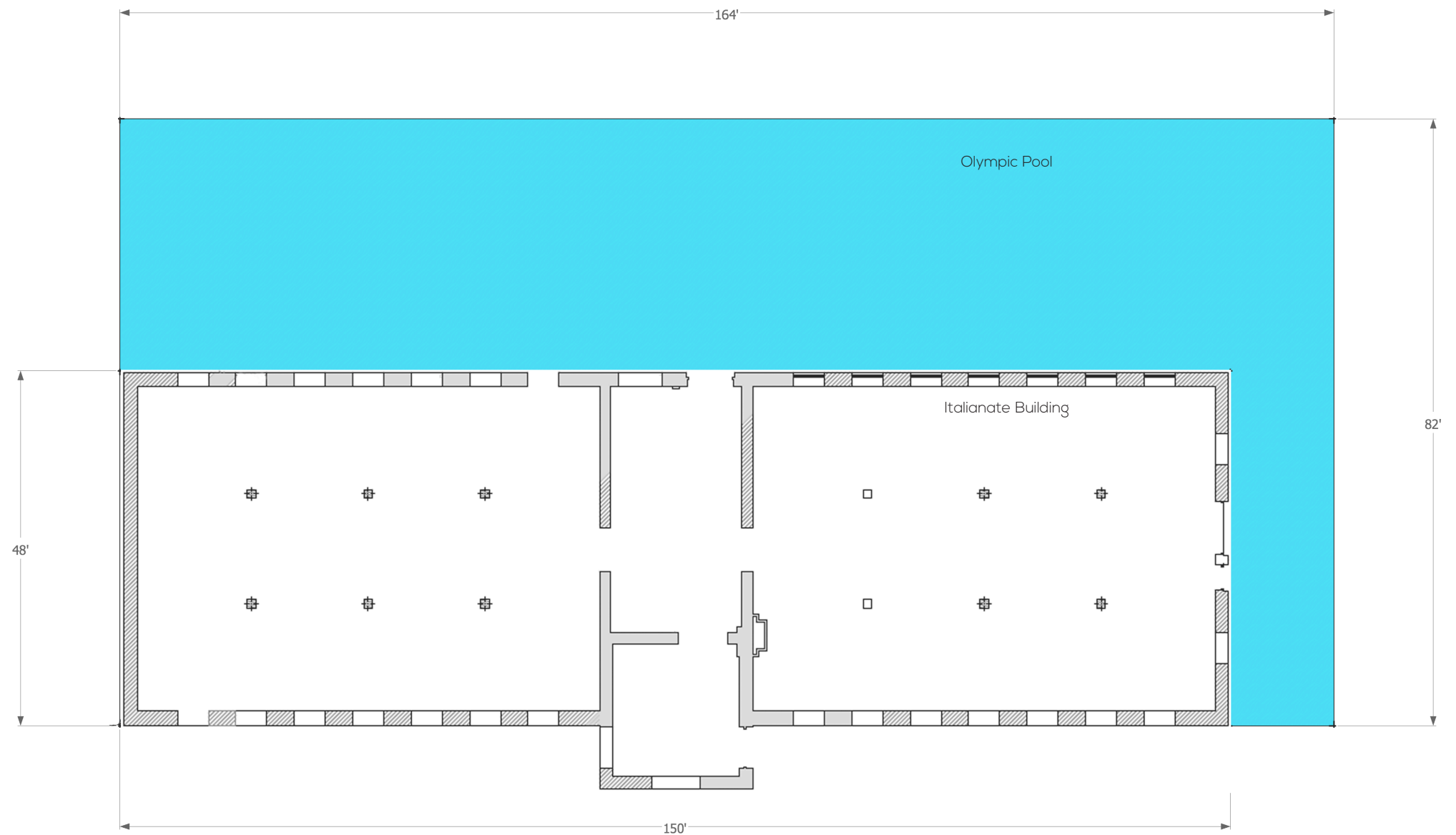


An Olympic pool is 13,448 Square Feet, while the Italiante Building's 1st floor is only 7,200 Square Feet, with less than 3,000 Square Feet of actual pools.

Therefore, the pools in the Public Bath House will be much smaller and more intimate than an Olympic sized swimming pool.

The primary function of the Public Bath House will be for public interaction, relaxation, and reflection, unlike the vigorous exercise intended in an Olympic pool.

SIZE COMPARISON



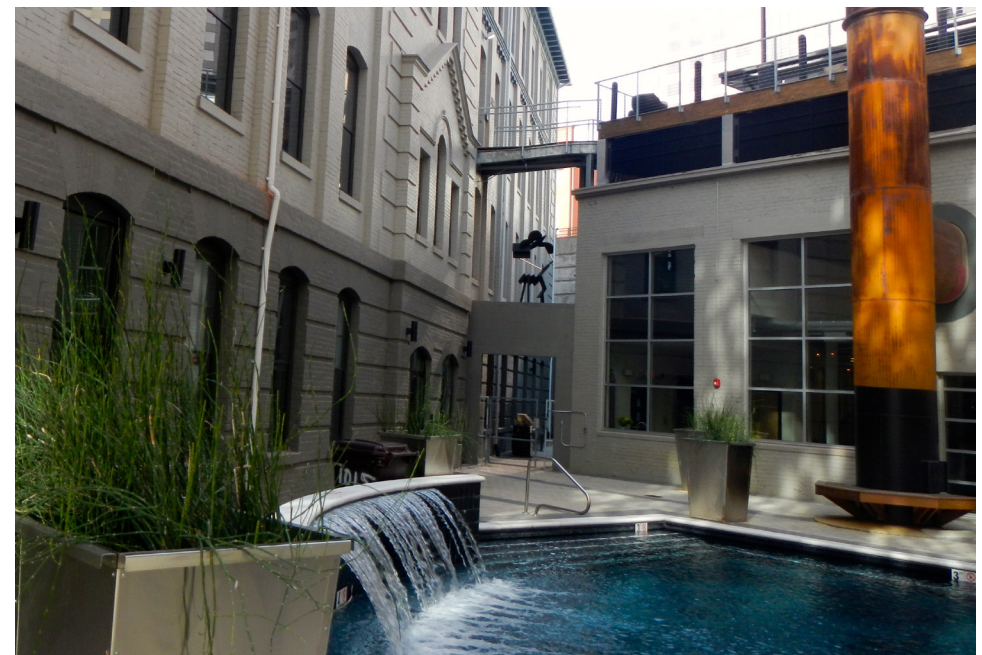
Site

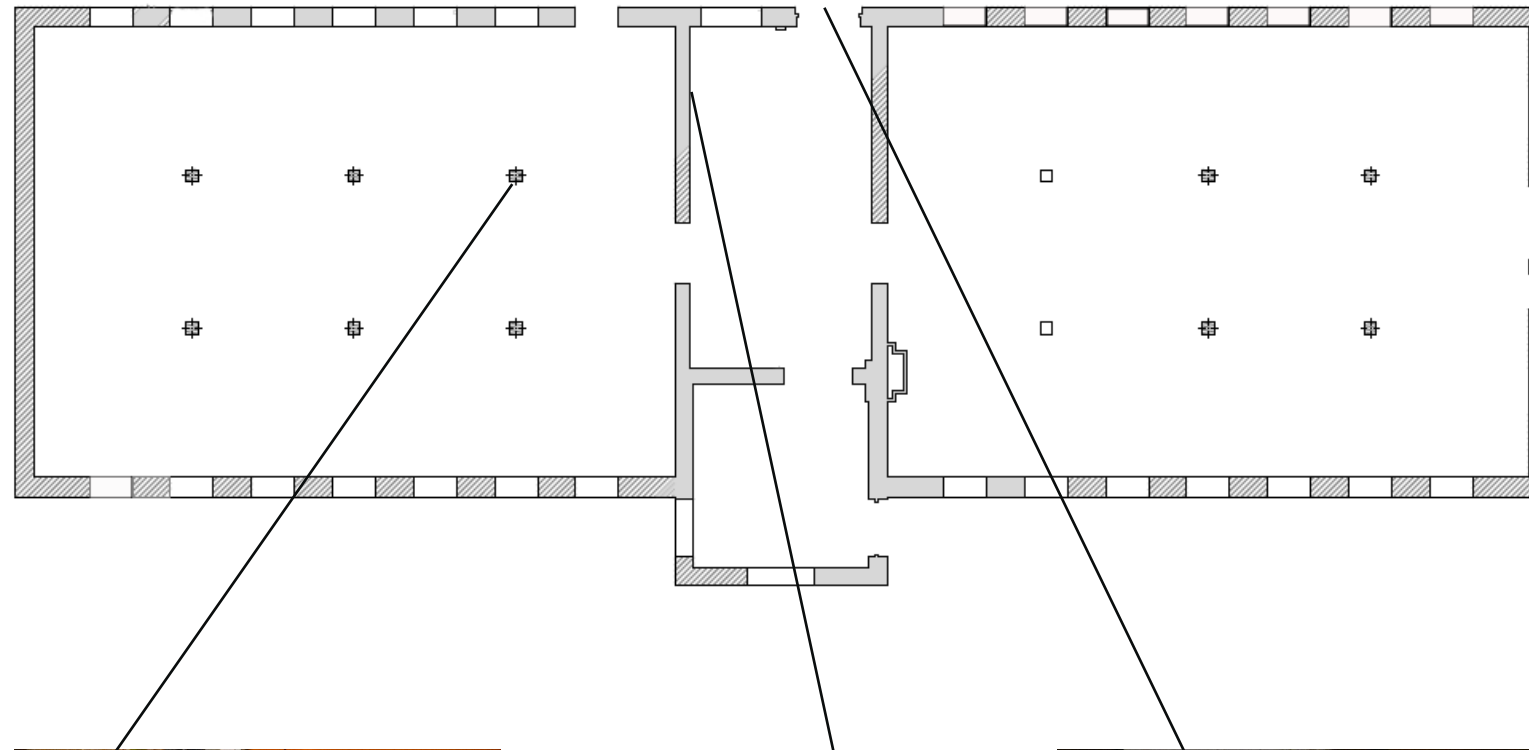
Significance

The site of the Reynolds building was selected for several reasons.

The exploration of water is a main driver of my thesis project.

The building is positioned parallel to the canal, which is also parallel to the James River. At this site, water is contained by the built environment within the canal, and also exists in close proximity as a free-flowing and powerful river in its natural form. The public bath embraces this juxtaposition of water as a commodity that is exploited and as a powerful natural force.





Existing Interior

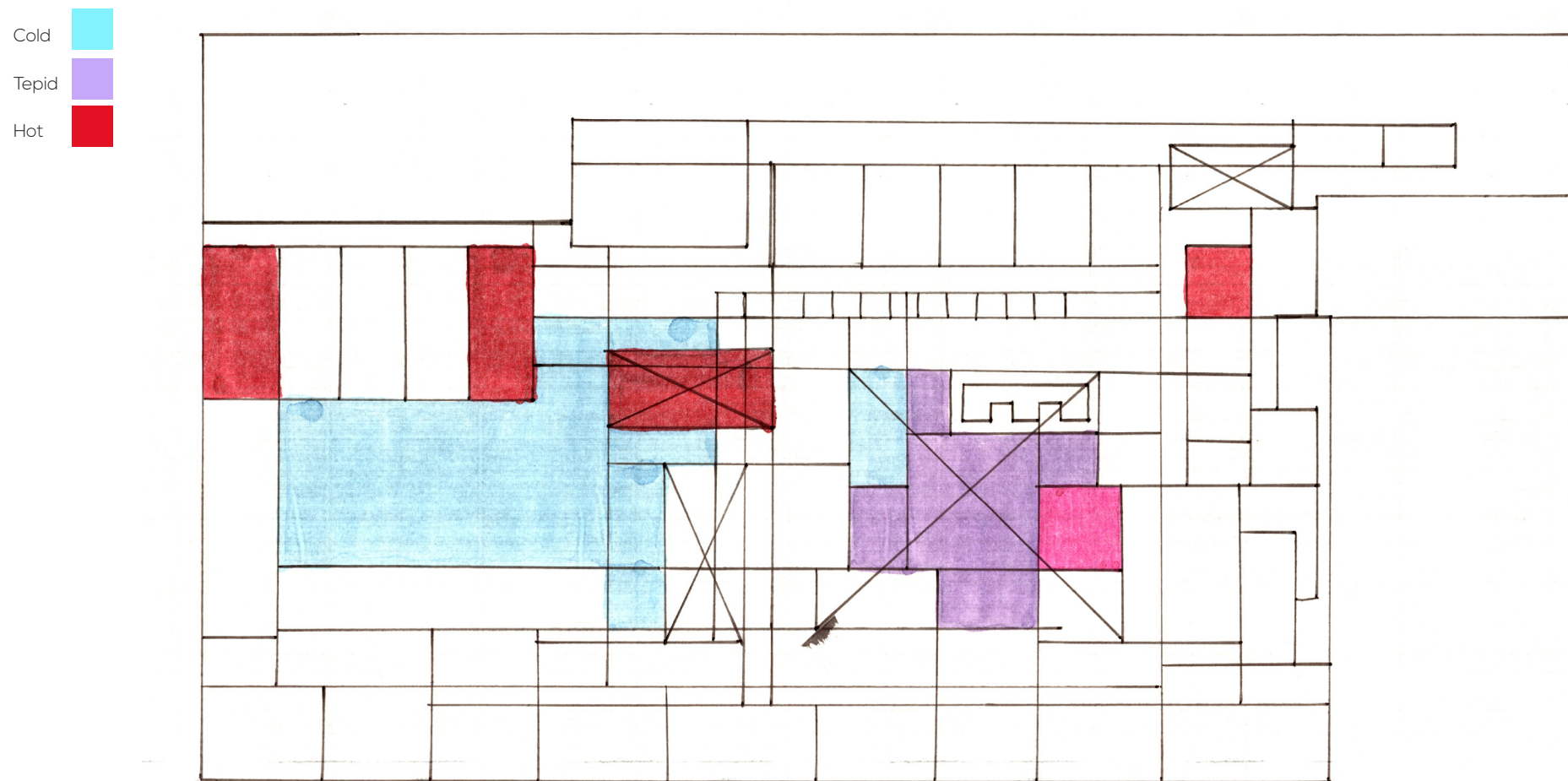
The interior of the Italianate building has many original features still in tact giving the space a rich character. The wood floors have been refinished on the upper levels and the original concrete slab has been acid stained on the first floor. The solid wood columns and beams are all original, as well as the load bearing brick walls and deep window sills.



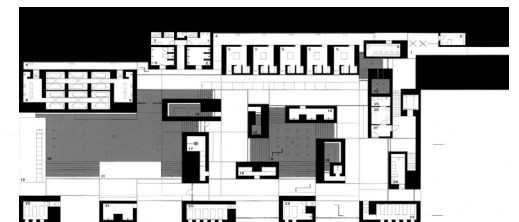
CASE STUDIES

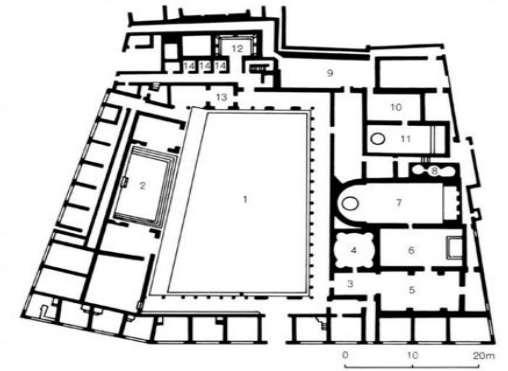
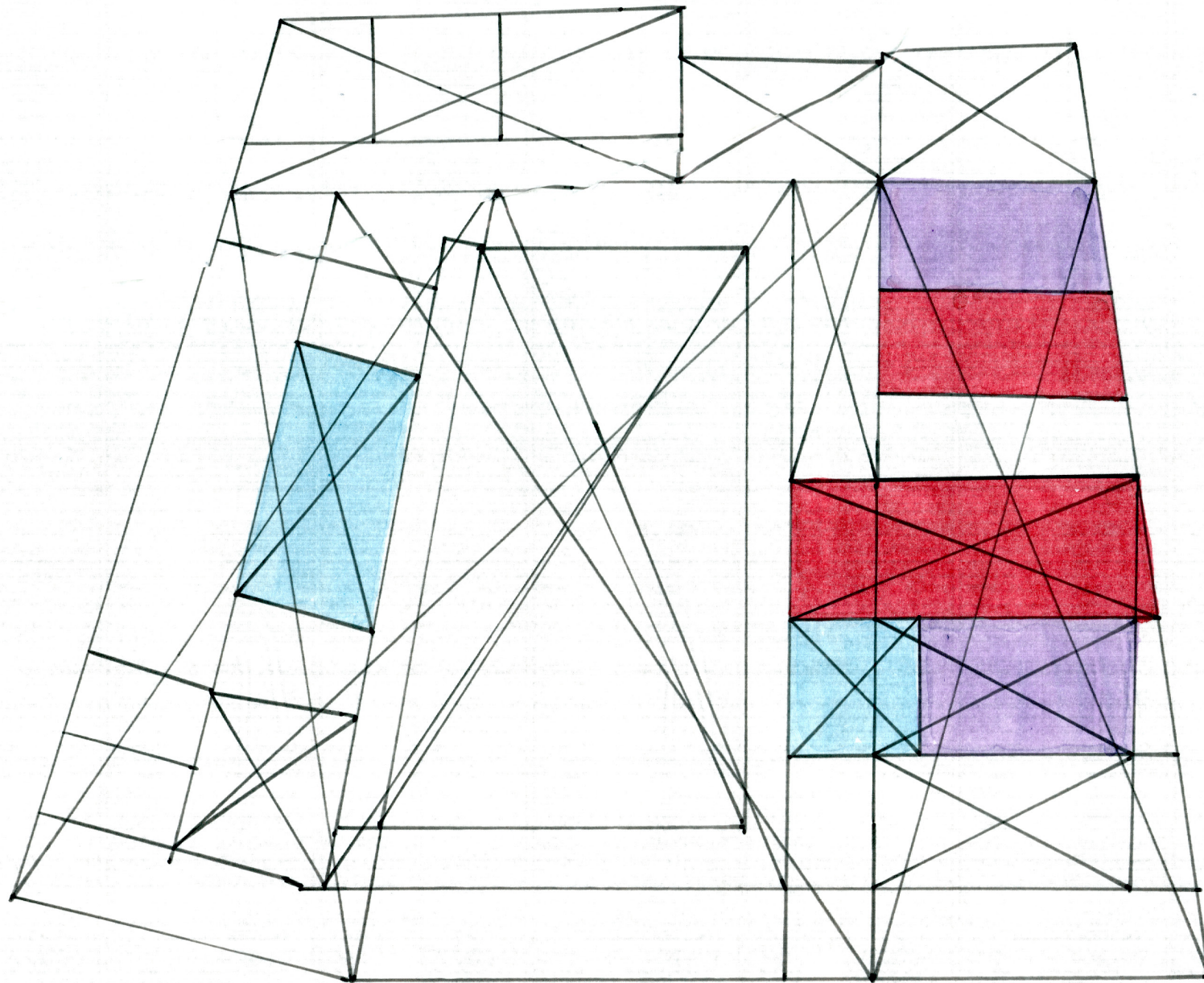


Geometric + Pool Temperature Analysis



ZUMTHOR: THERME VALS, SWITZERLAND

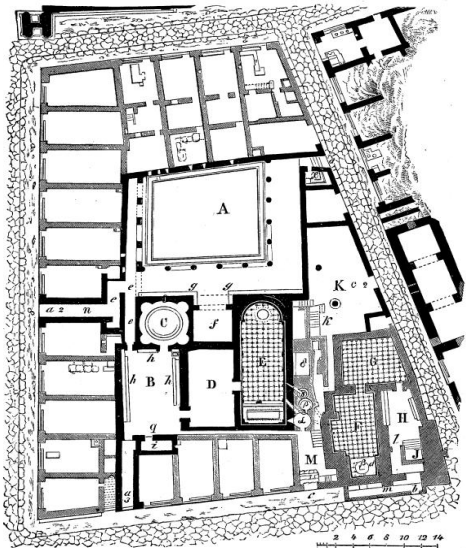
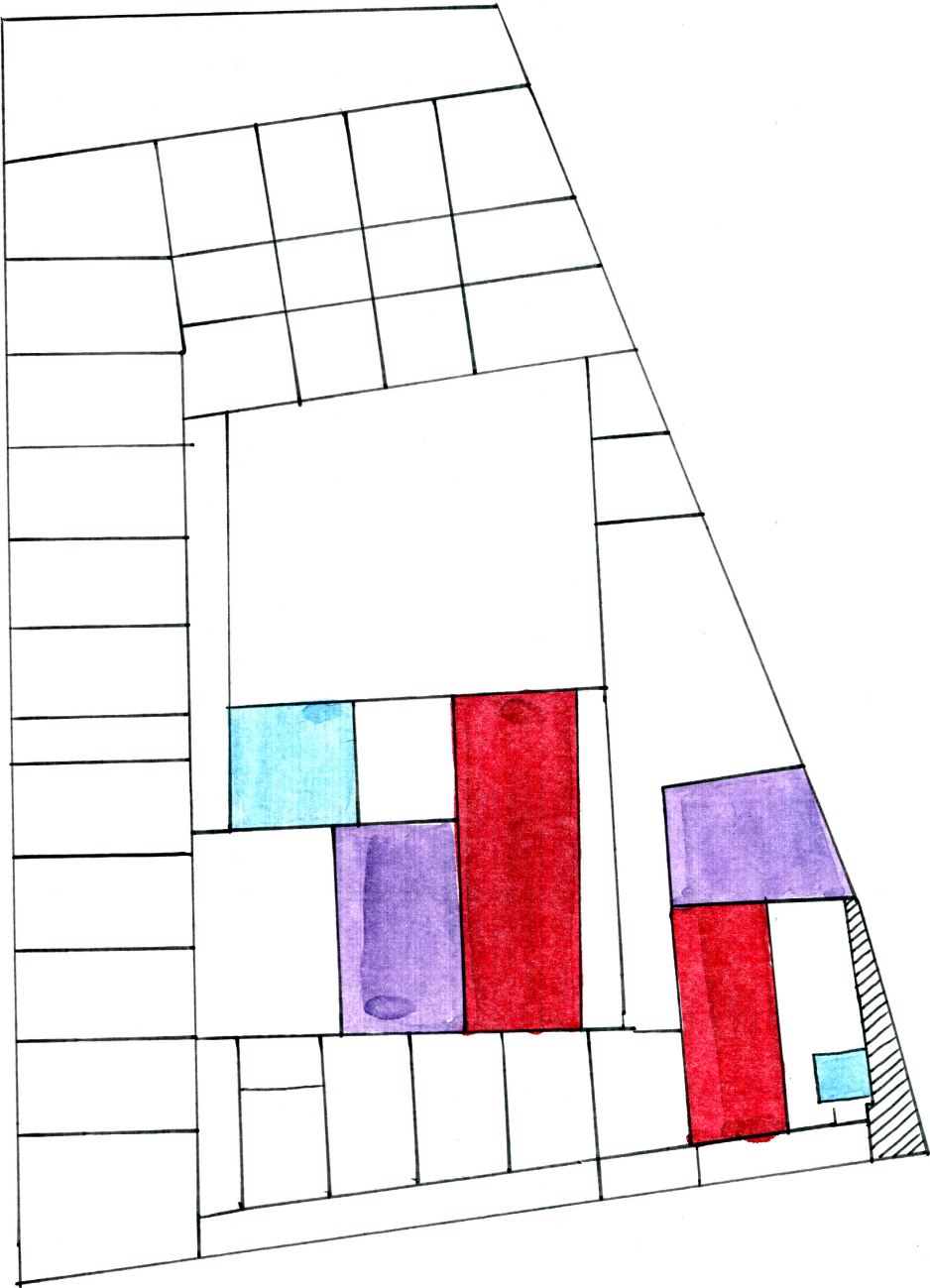




STABIAN BATHS, POMPEII

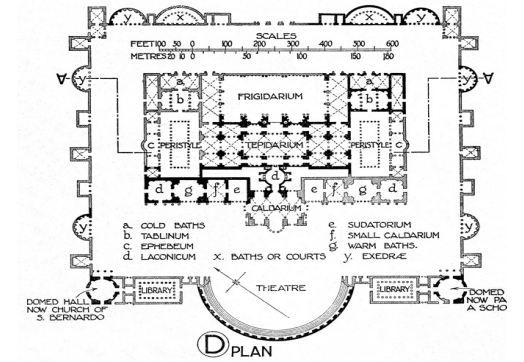
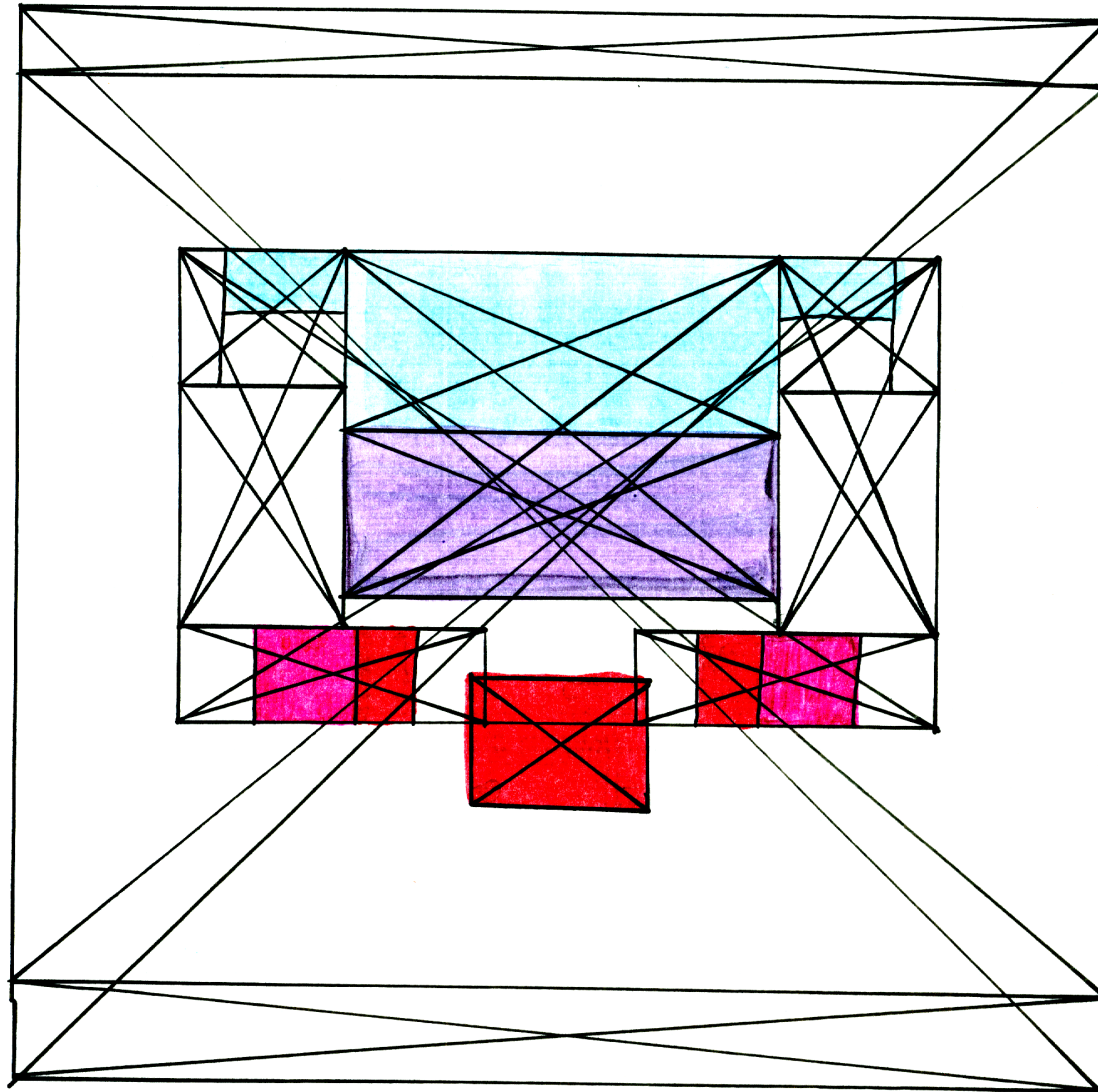
Geometric + Pool Temperature Analysis

- Cold
- Tepid
- Hot



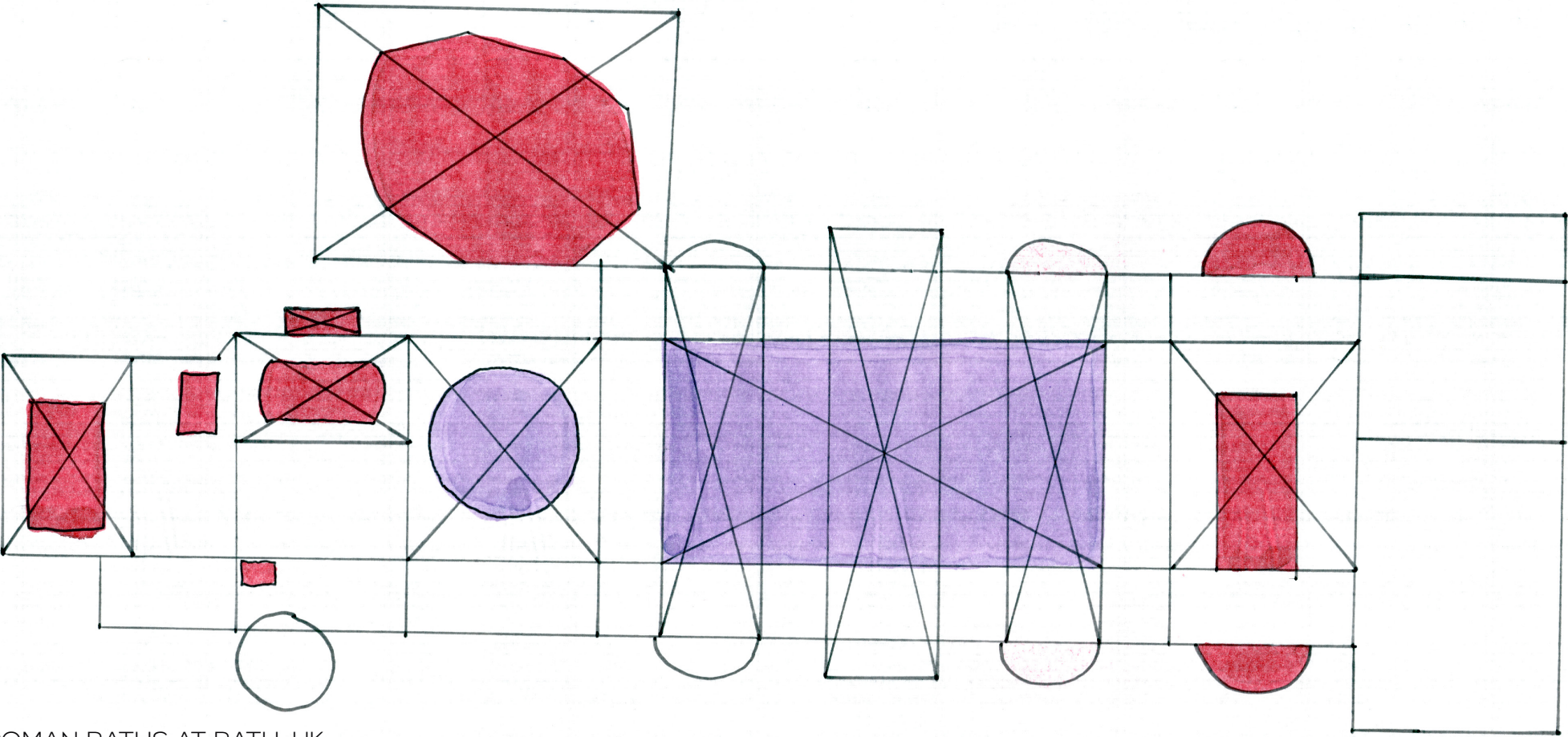
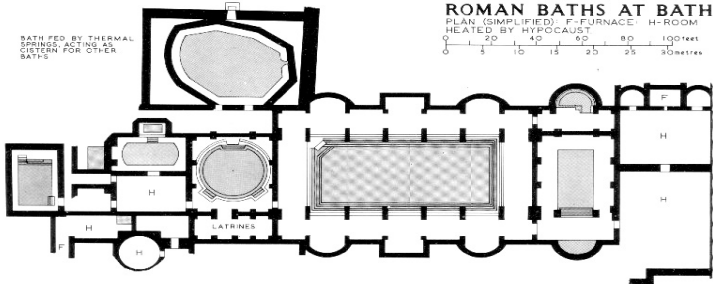
Plan of the Old Baths at Pompeii. (Overbeck.)

OLD BATHS AT POMPEII

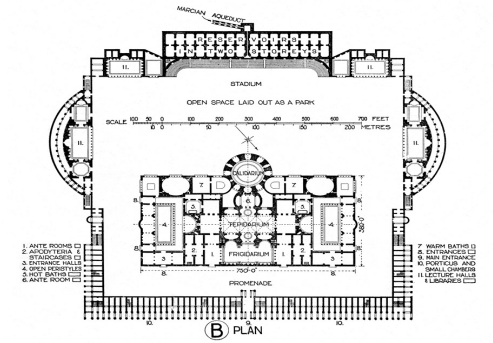
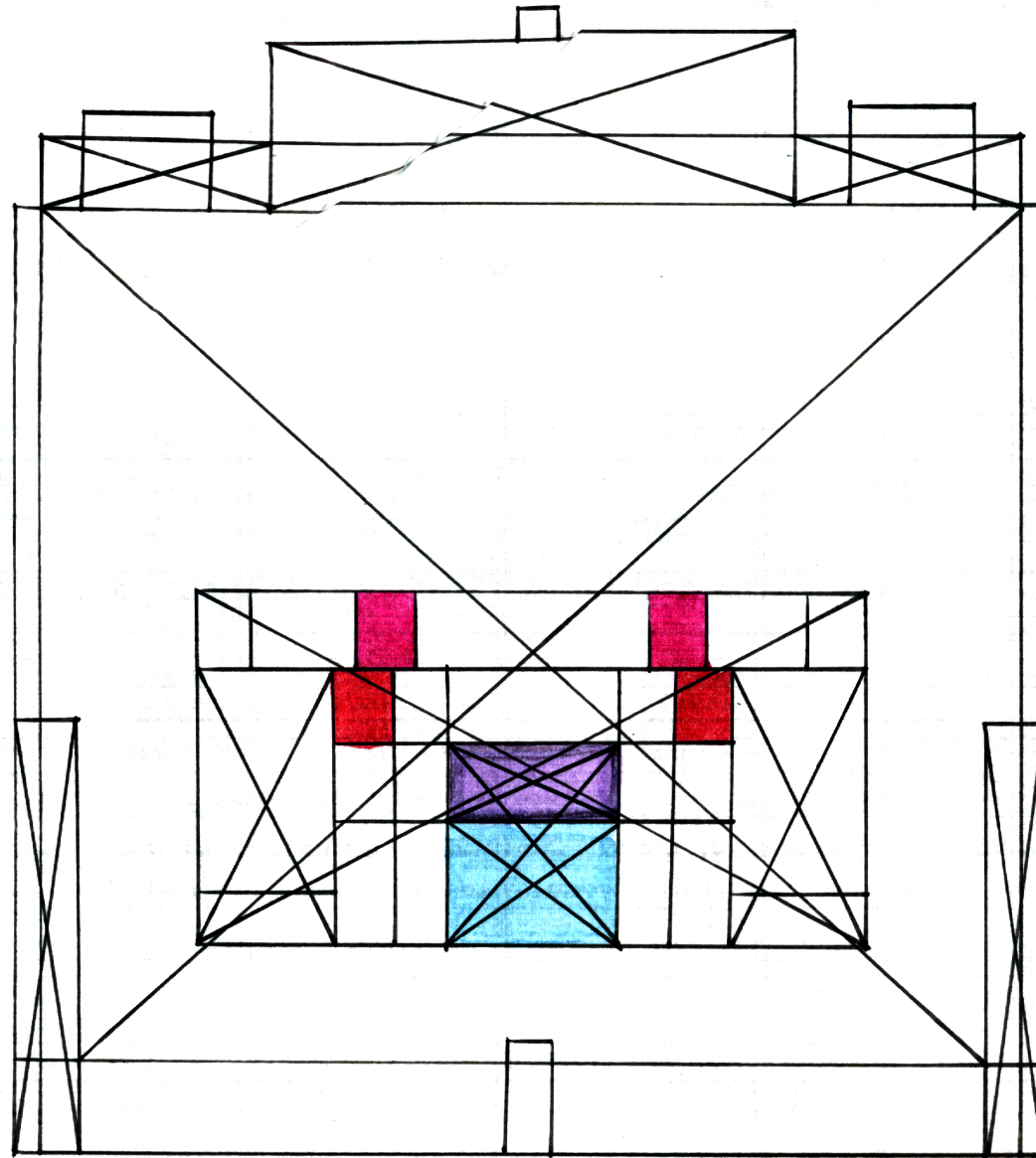


BATHS OF DIOCLETIAN, ROME

Geometric + Pool Temperature Analysis



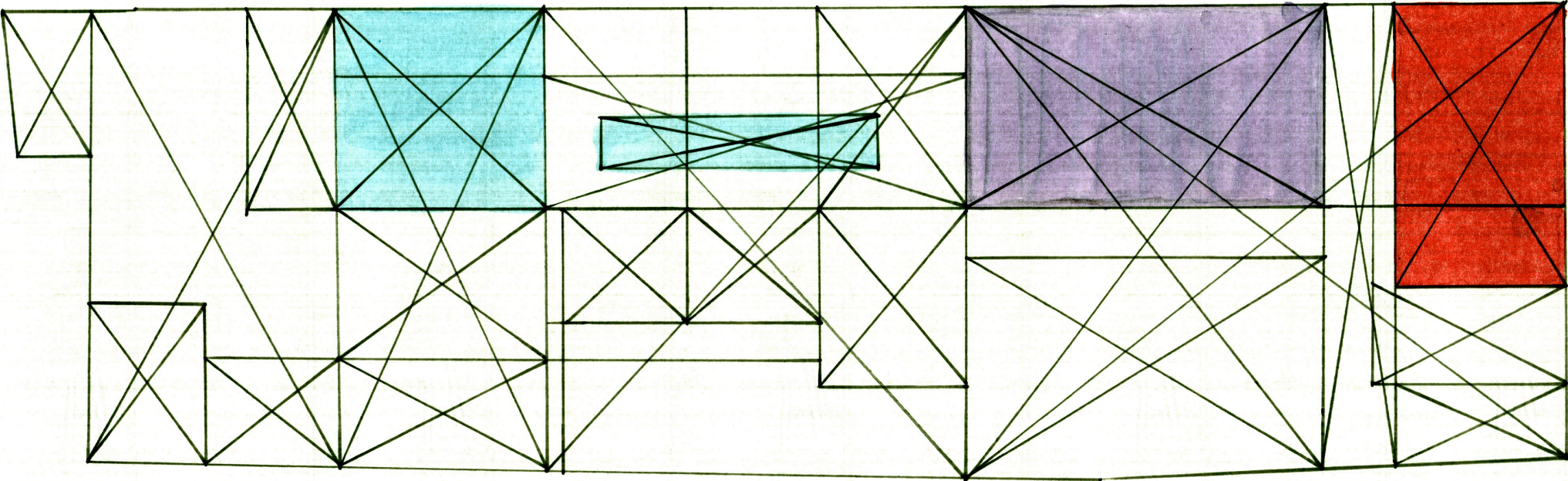
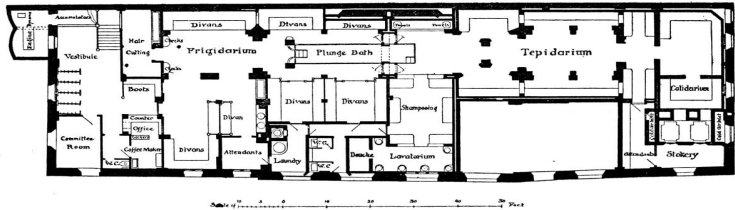
ROMAN BATHS AT BATH, UK



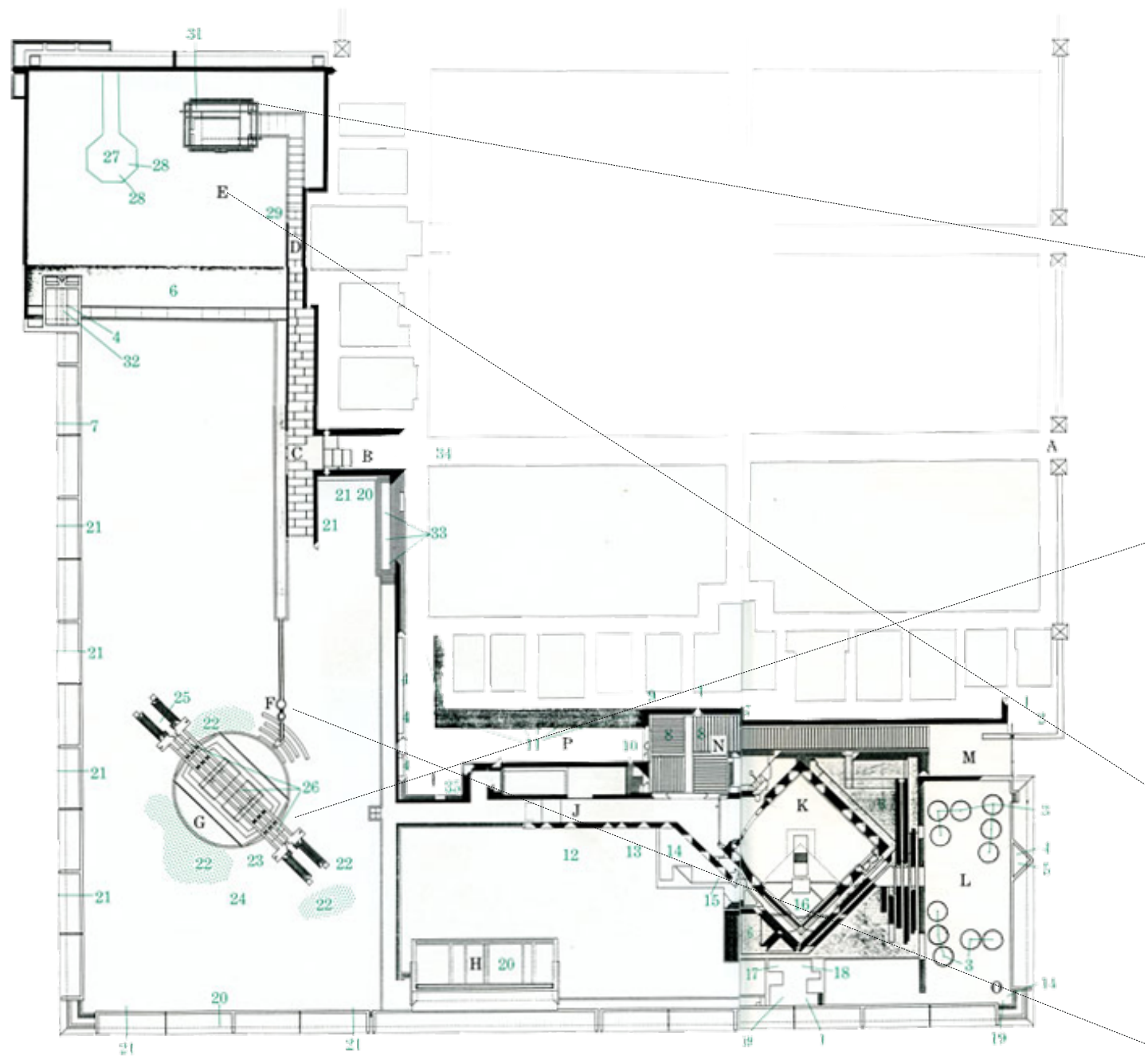
BATHS OF CARACALLA, ROME

Geometric + Pool Temperature Analysis

- Cold
- Tepid
- Hot



TURKISH BATHS, SAVOY HILL, LONDON



BRION TOMB + SANCTUARY BY CARLO SCARPA

San Vito d'Altivole, Italy

A case study
on connections,
details,
materiality,
and form,
especially
in terms of
vessels to
hold water.



Sensuous
physicality of
concrete forms

3



Extension +
overlap of
margins

5



Geometric
architecture
frames +
complements
nature

6

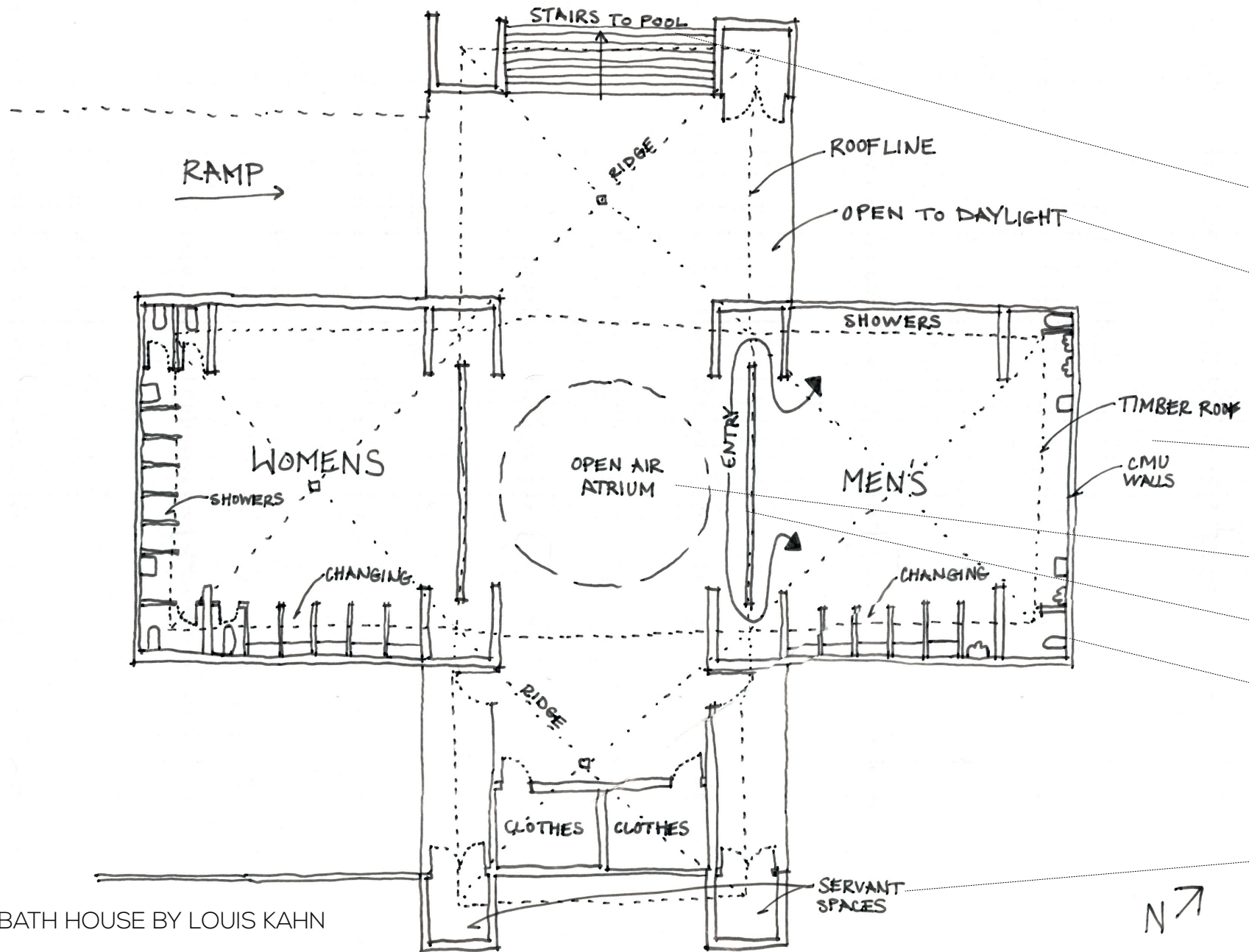


Sensitivity to
transitions +
materiality

7

Detailed concrete casts juxtaposed against
lush nature allow for simultaneous celebration
of the man-made and the natural.

Plan Analysis



TRENTON BATH HOUSE BY LOUIS KAHN

Built mid 1950's,
restored 2010

4 square
concrete-block
rooms: a basket
room, atrium,
changing rooms, +
a porch that leads
up to an elevated
outdoor pool

Use of natural
light to define
functions
of space

Beauty in
basic building
materials: Wood,
Concrete Block

Pyramidal roofs
surround an
open-air atrium

Kahn both divides
and relates space

Use of simple
geometric forms

The plan has
'served spaces' +
'servant spaces'

In the Trenton
Bath House, each
space is isolated,
yet related to
every other
space. There
are secondary
"servant" spaces
and primary
"served" spaces.



8

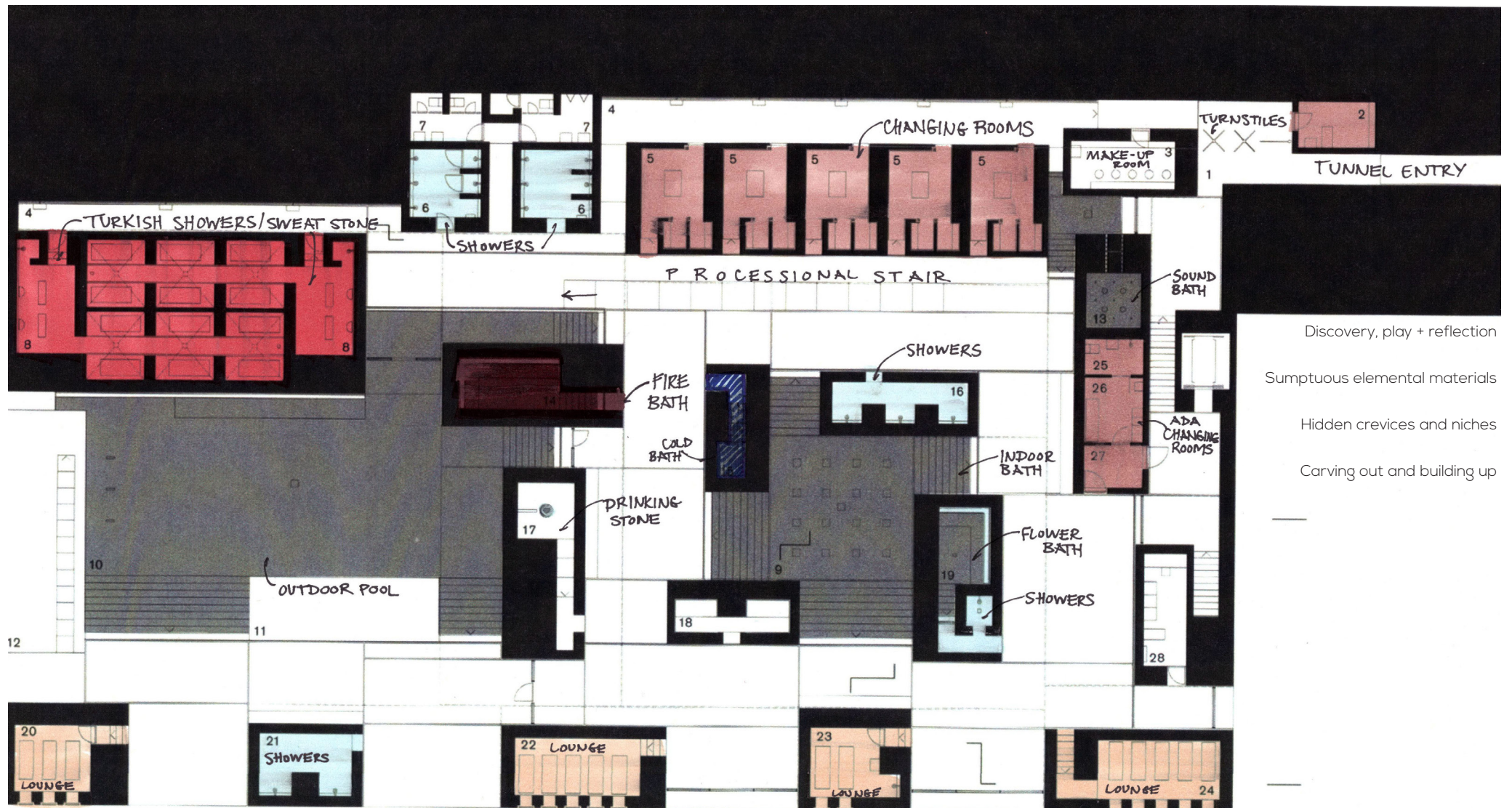
Louis Kahn
believed that
buildings have
a spirit. He also
believed that a
room is defined
by structure
and light.



9



"Structure, which
gives the light."
-Louis Kahn

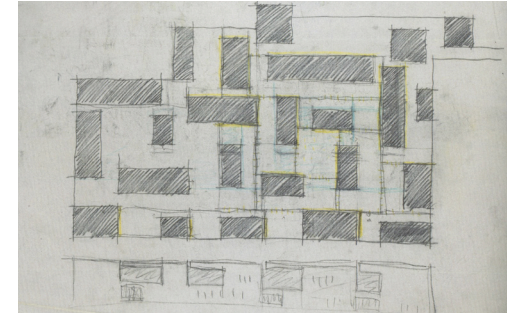


- Discovery, play + reflection
- Sumptuous elemental materials
- Hidden crevices and niches
- Carving out and building up

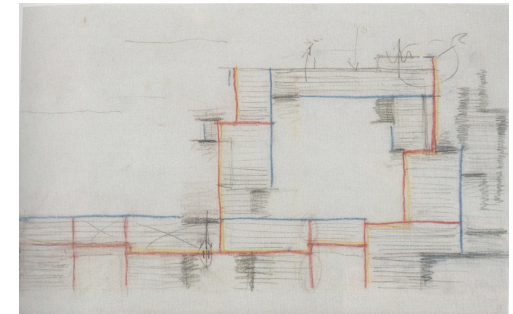
"Rooms may owe their existence to an idea, but in the end, they consist of substance, of material that often does not obey any idea but rather, wants to come into its own."
-Peter Zumthor

What should the baths be?
through the eyes of Zumthor

rays of light falling in semi-darkness, illuminated, stone basins, rising steam, immersion, columns "like boulders standing in water," quiet, rooms fading into shadows, "the layers, the infinitely iridescent tones of grey," all the sounds of water, "gurgling voices from the depths," echoing, serene, primeval, meditative, utterly enthralling...



13



12

"Drift. Allow yourself to wander aimlessly.
Explore adjacencies.
Lack judgment.
Postpone criticism." -Bruce Mau

14



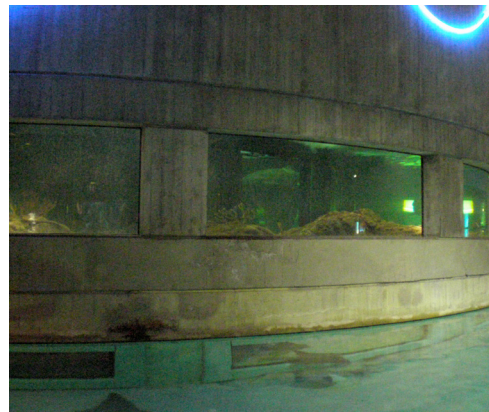
76

Containing
water: Dams
as vessels



Hoover Dam 17

National
Aquarium,
Baltimore, MD:
Aquarium as
a vessel



15

A visual study
of how water in
its natural state
is contained by
monumental
man-made
vessels.



Glen Canyon Dam 18

INSPIRATION



16



20

A visual study
of various man-
made forms
created to hold
large quantities
of water

La Ciudad de las Artes
y Ciencias, by Calatrava



21



22



23



KELLY NATATORIUM AT FAIRMOUNT PARK

Containing
water in an
industrial
environment:

Columns stand
along side the
pools as well as
within the pools
themselves. The
atmosphere
is both that of
an industrial
warehouse
and an ancient
Roman bath. The
poured concrete
juxtaposed
against the brick
arched ceilings
and windows
gives a wonderful
contrast of
the modern
and the old.



25



27



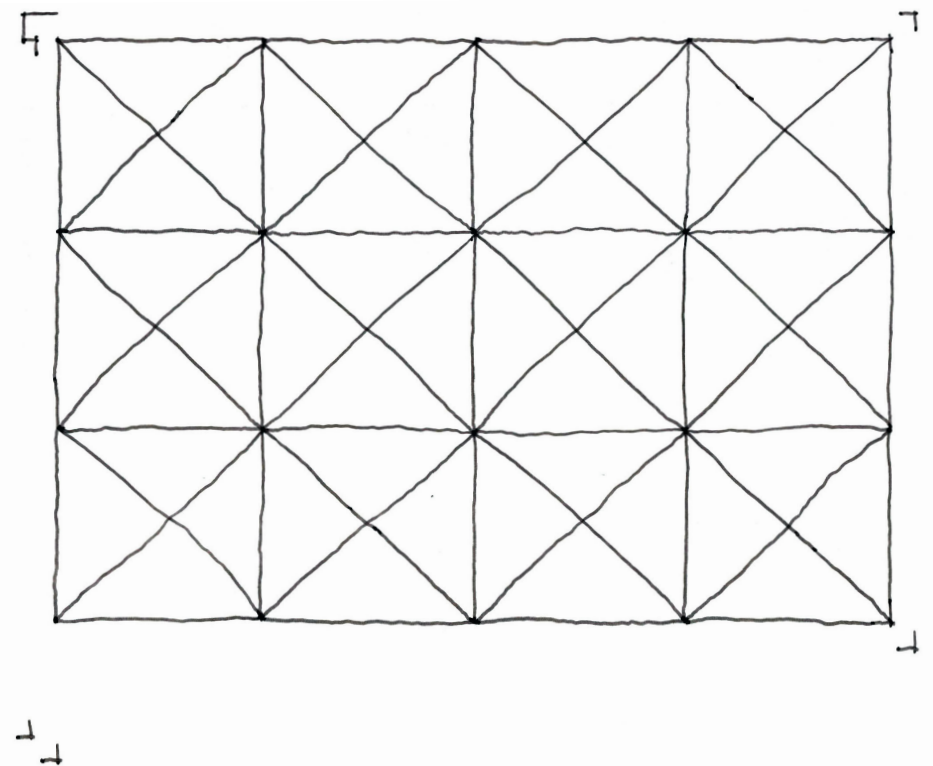
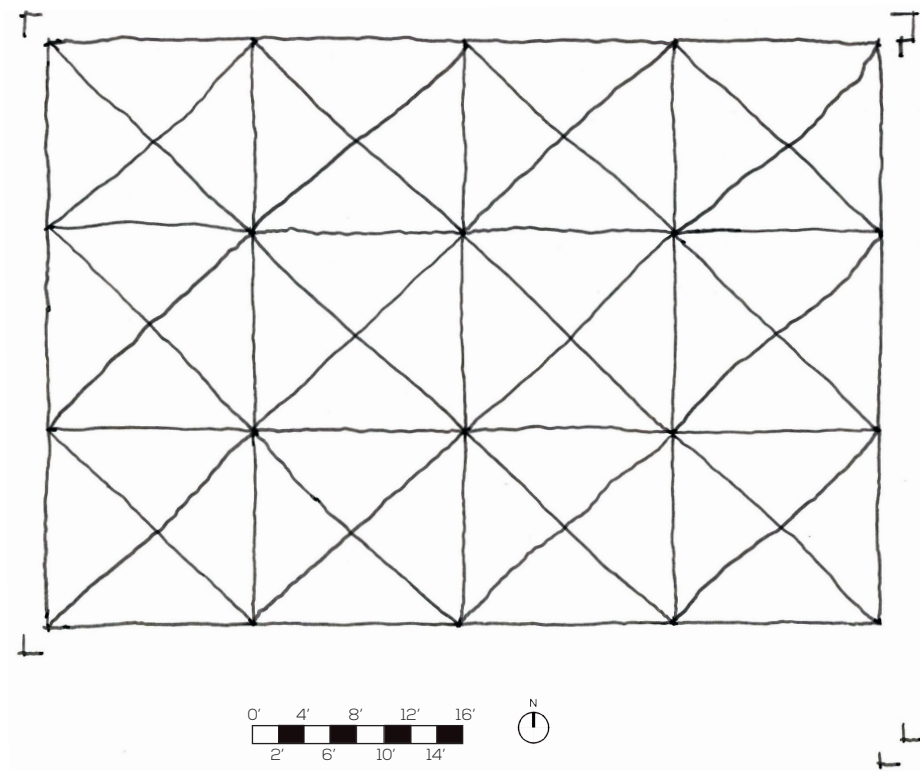
26



28

SCHEMATIC DESIGN

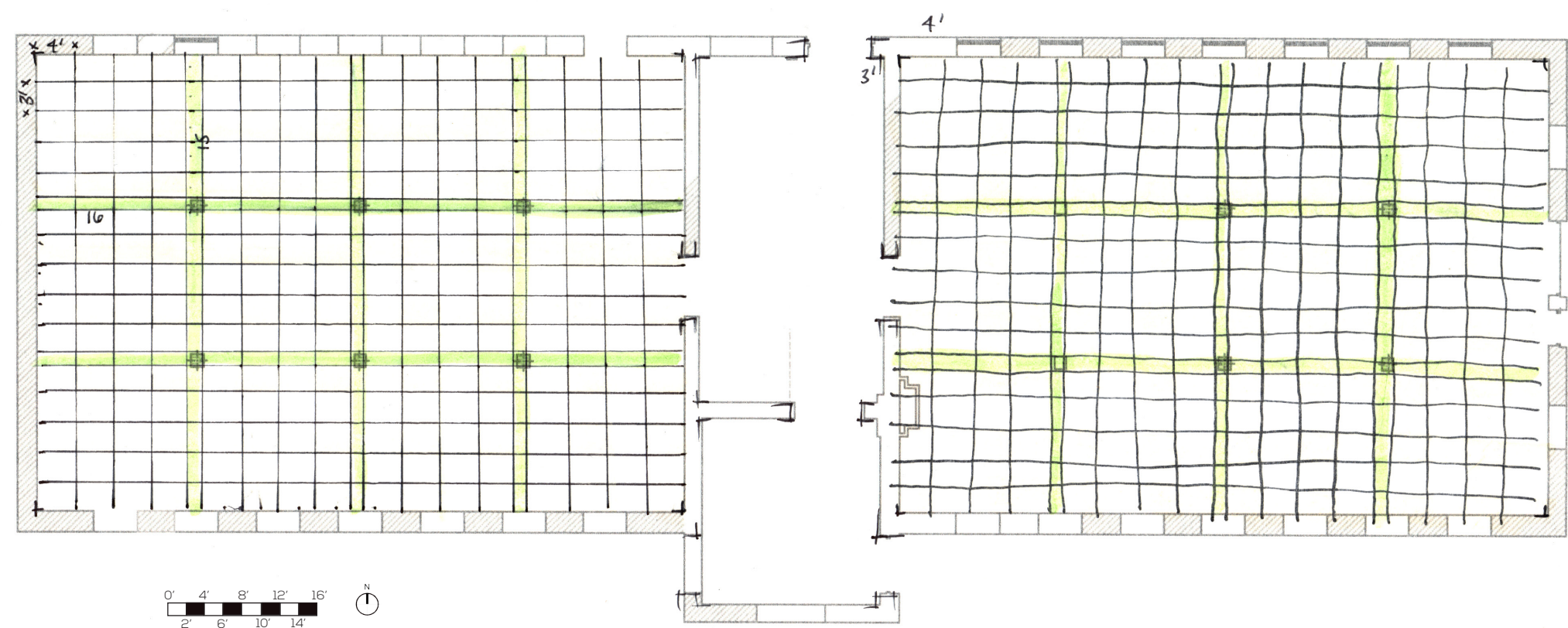


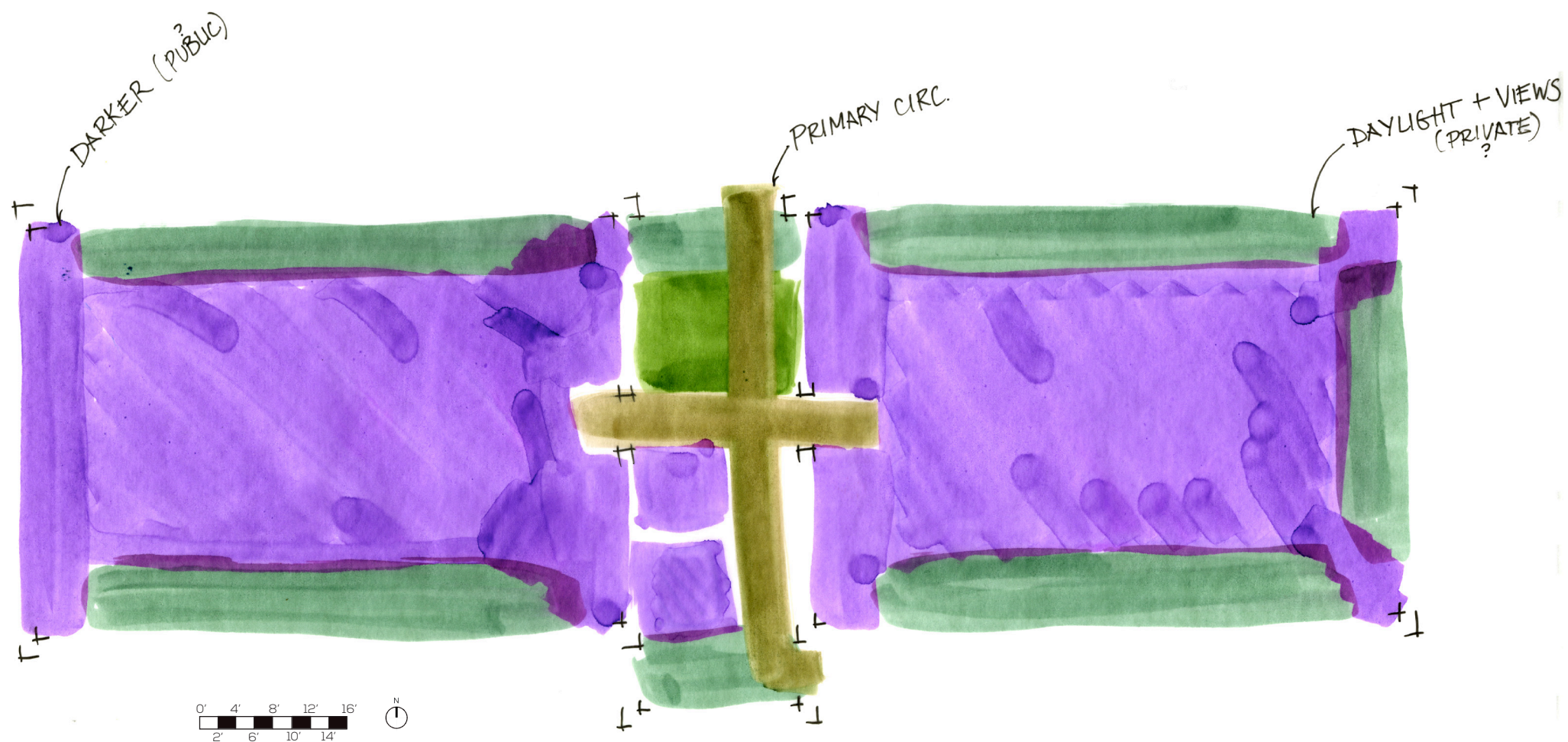


Geometric Analysis

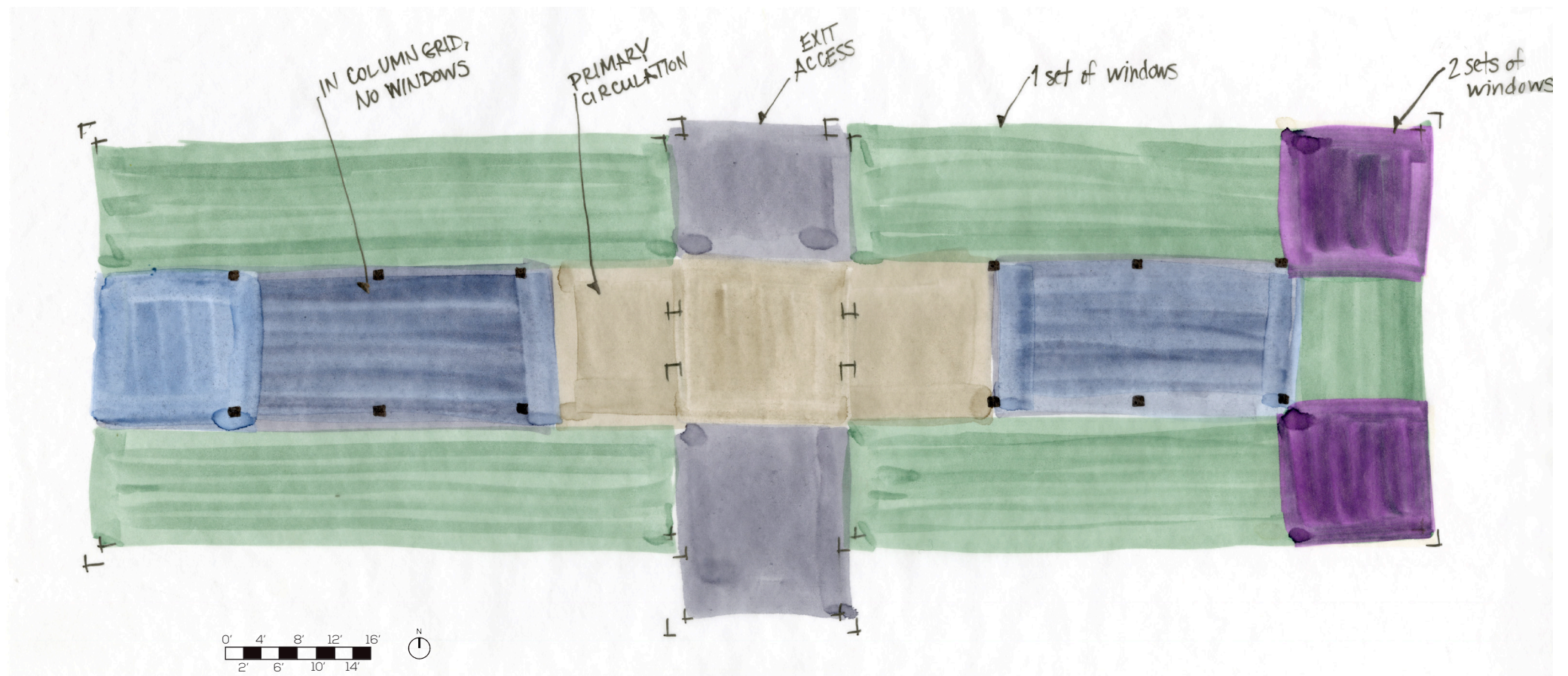
ITALIANATE Building

First Floor Structural Grid Analysis

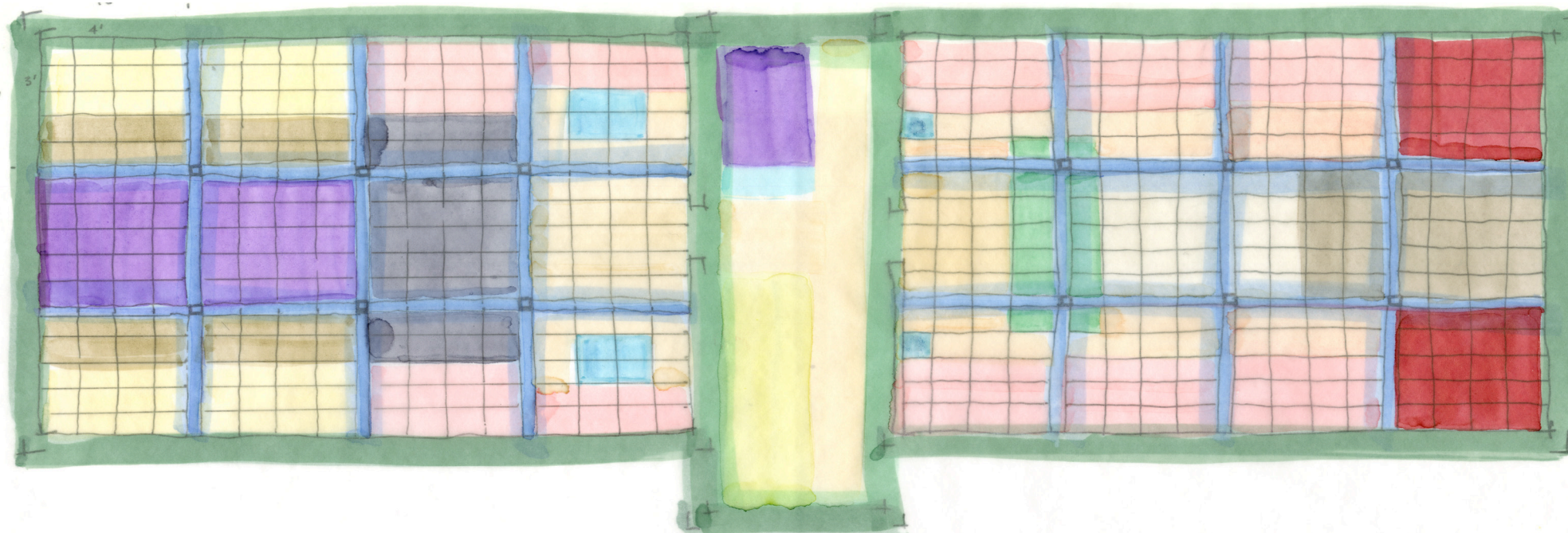




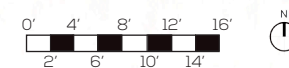
Circulation + Views Diagram

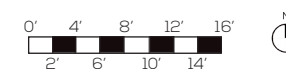
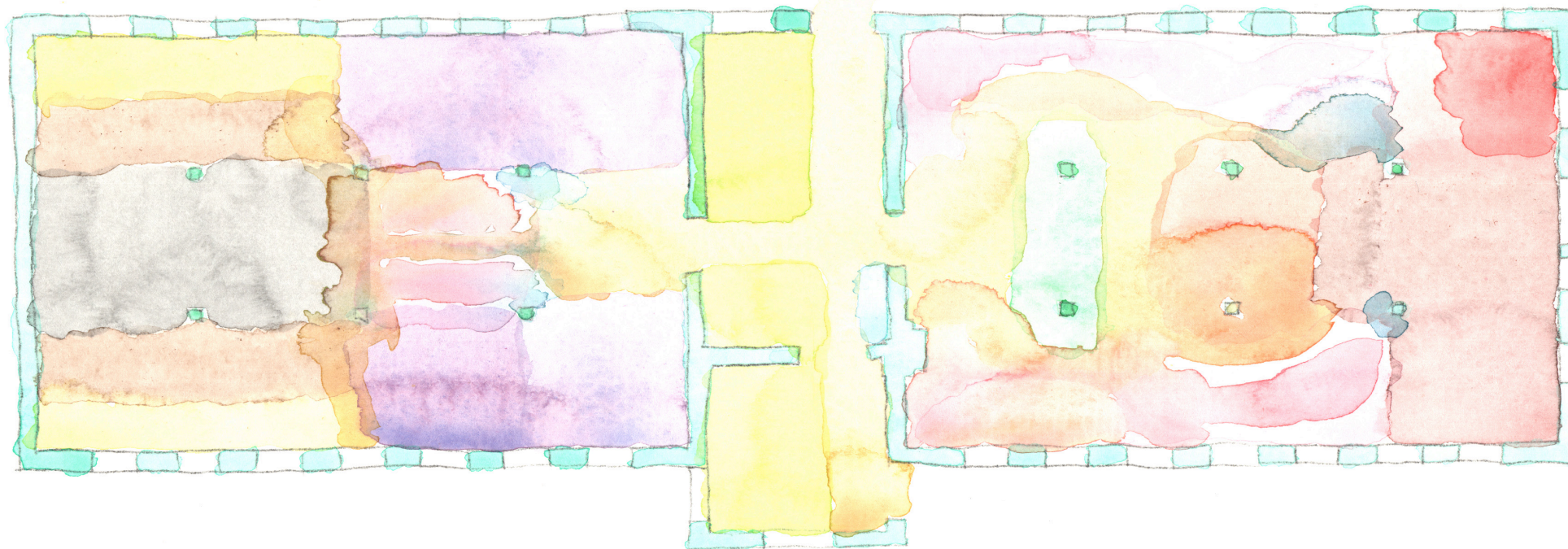


Privacy Diagram



- | | | | |
|---|-----------------------|---|--------------------------------|
|  | STRUCTURAL WALLS |  | WHIRLPOOL/
VORTEX |
|  | CHANGING
+ TOILETS |  | Saunas |
|  | SHOWERS |  | COLD BATH/
PLUNGE POOL |
|  | MUD BATHS |  | ENTRY/
PATHWAYS |
|  | HOT BATHS |  | REFLECTION/
RELAXATION |
|  | SALT BATH |  | DRINKING FOUNTAINS/
HOT TEA |
|  | ENTRY/TICKETS | | |

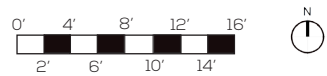




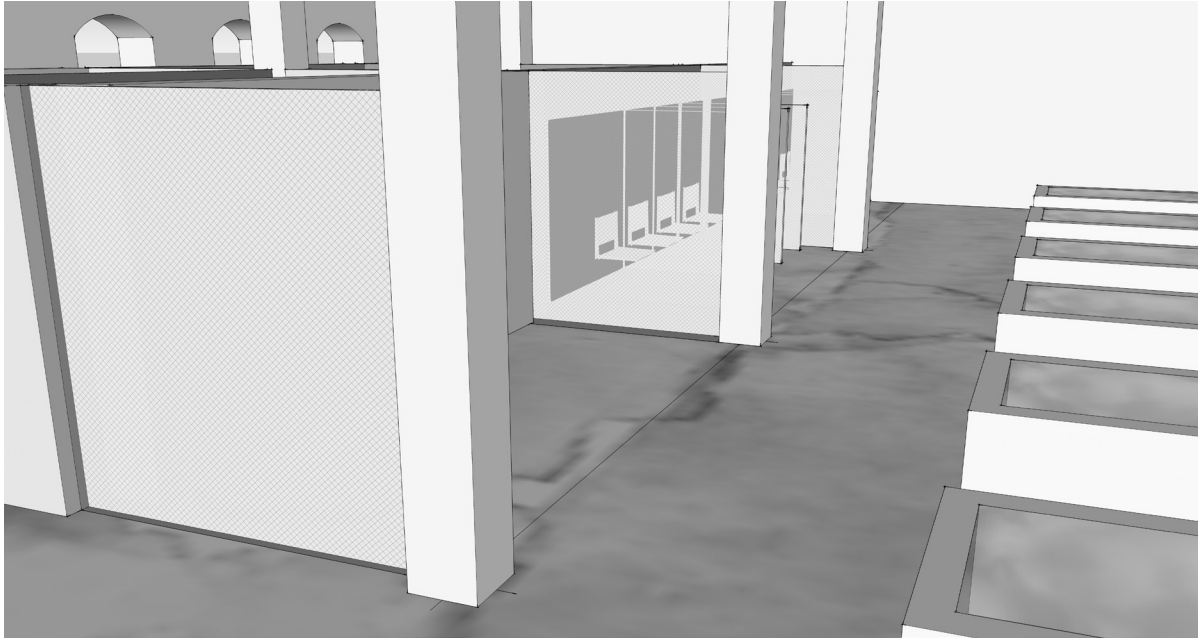
Program	Square Footage
Tea + Lounging	700 SF
Reception + Turnstiles	200 SF
Robes + Towels	300 SF
Changing + Lockers	900 SF
Saunas	400 SF
Showers <i>Mist, Spray, Waterfall, Pour, Rain, Splash</i>	1800 SF
Baths <i>Plunge, Warm, Hot, Wade, Salt, Vortex</i>	1500 SF
Pathways	875 SF
	6675 SF Total

DESIGN DEVELOPMENT

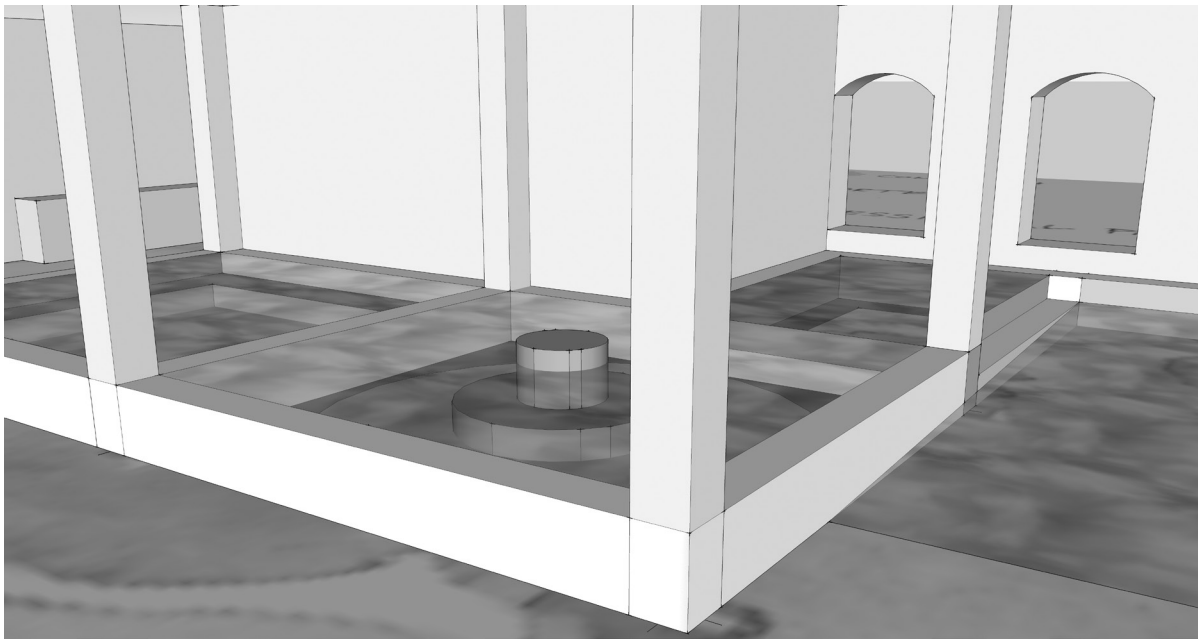




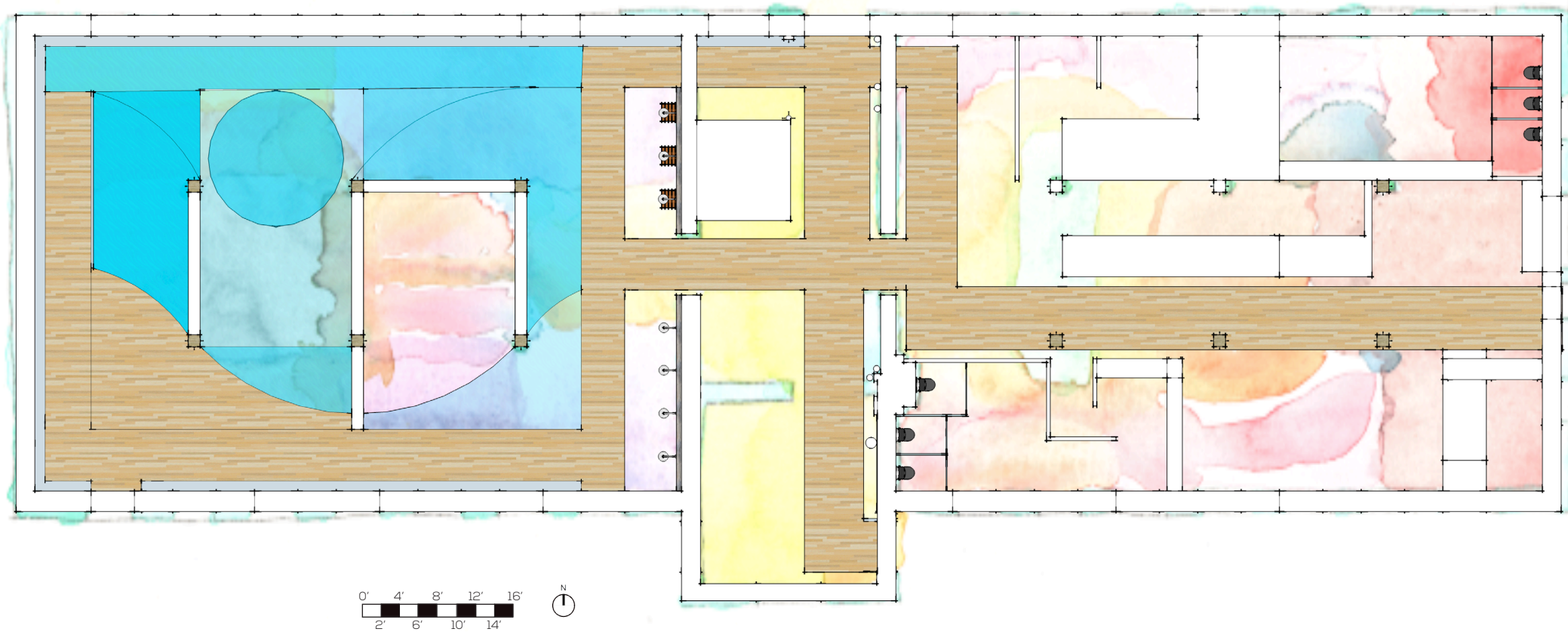
Preliminary Space Plan



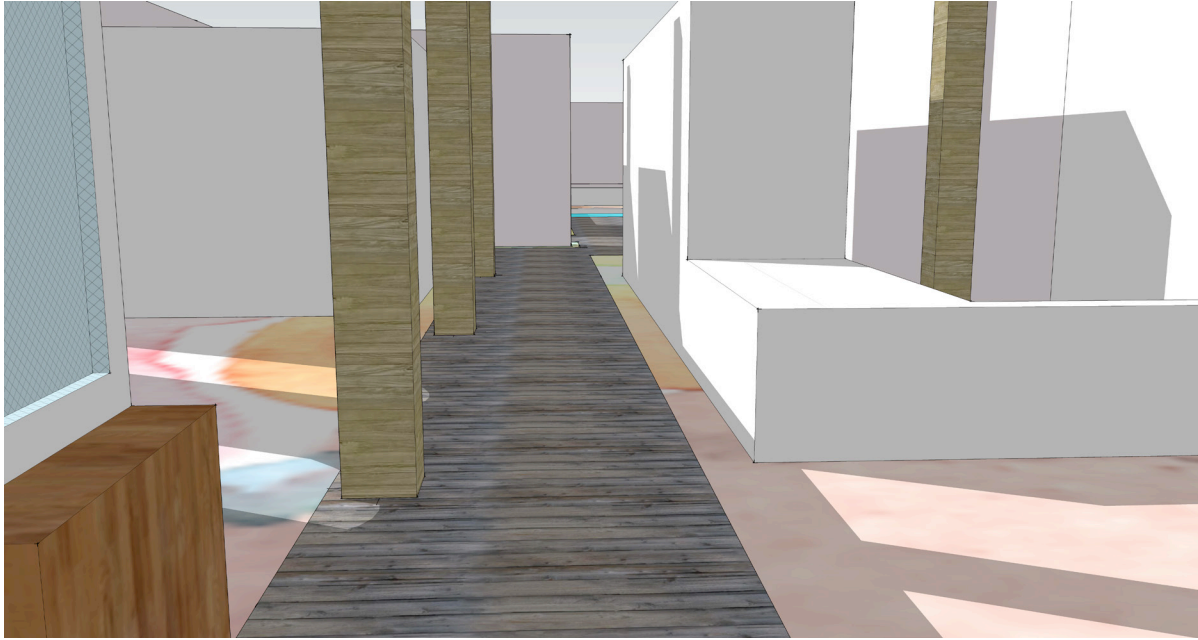
View of Mineral baths



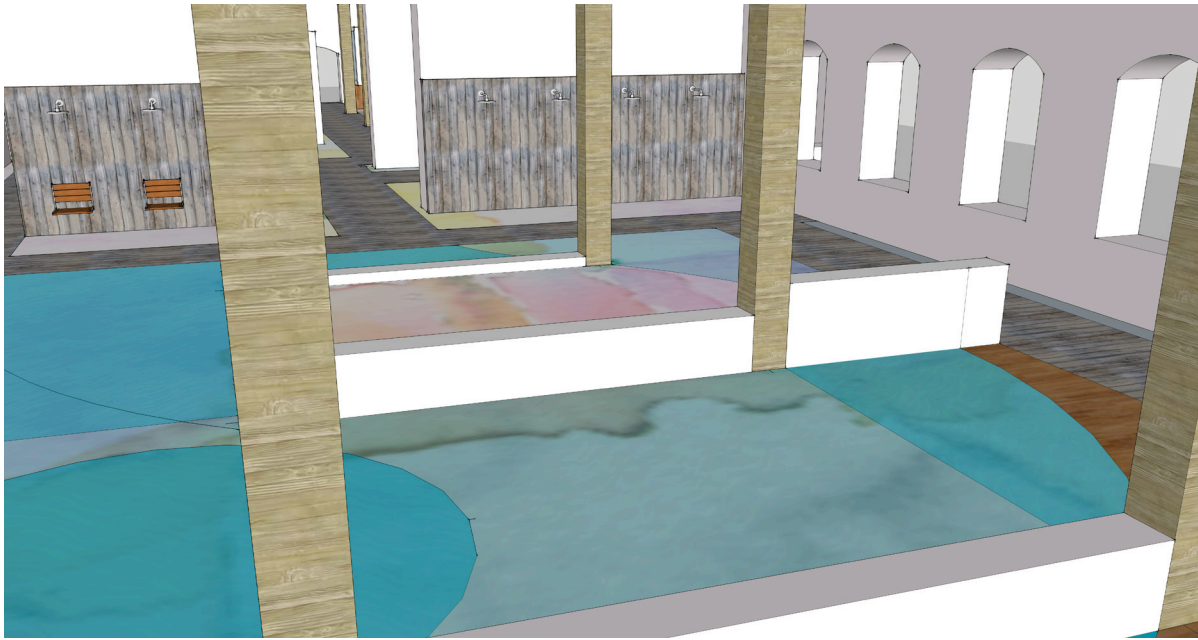
View of Warm baths



Preliminary Space Plan 2

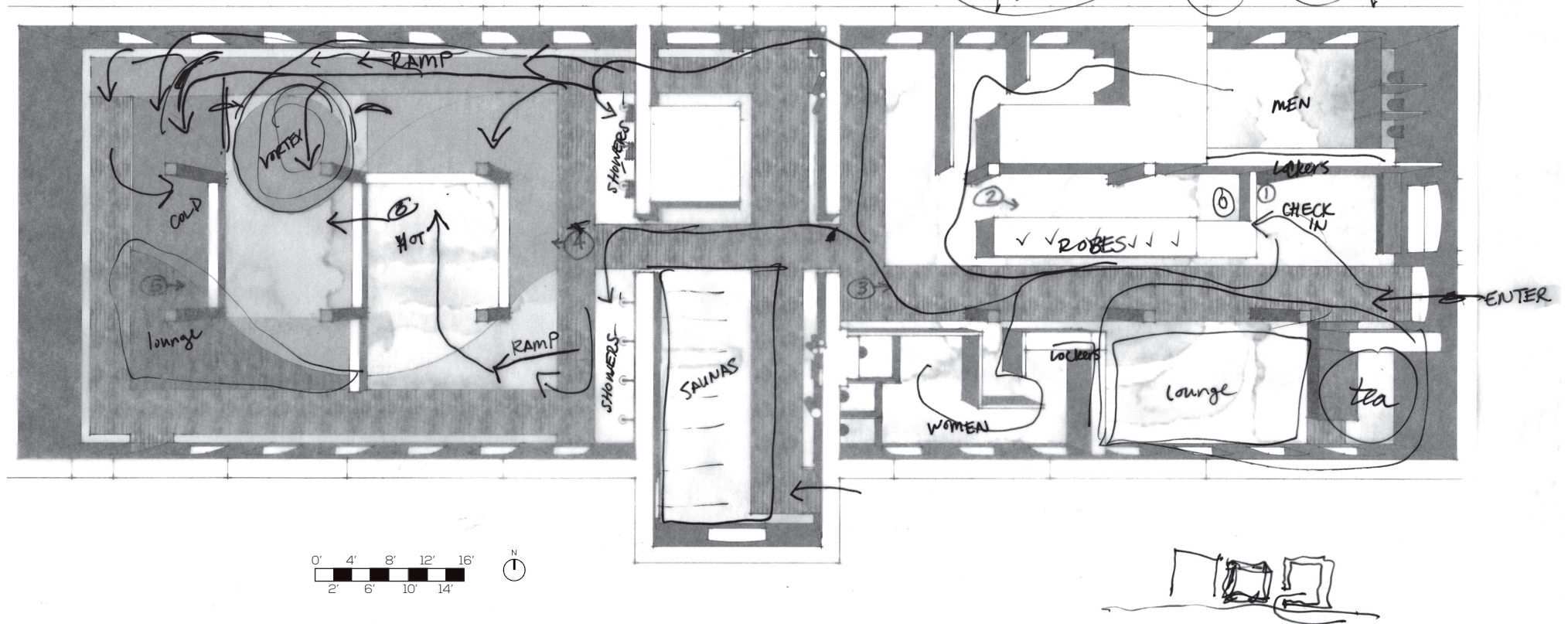


View from main entry



View of baths looking towards showers

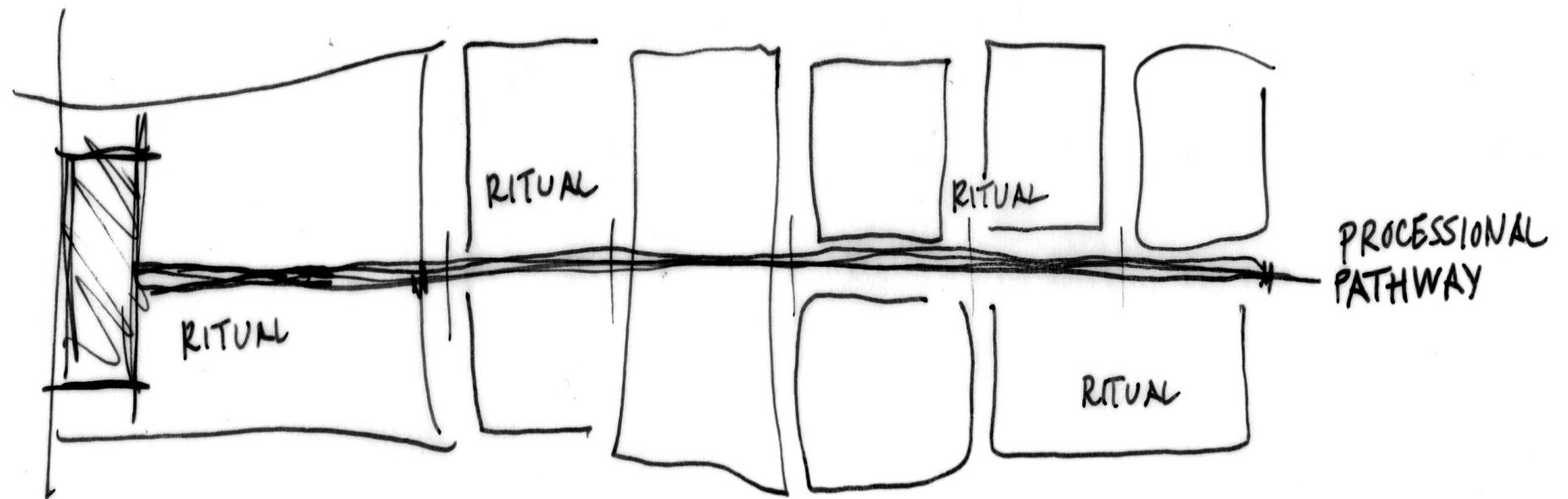
* WIREFRAME
 * DRAIN POOLS - NO WATER
 * WHERE PEOPLE SIT IN POOLS



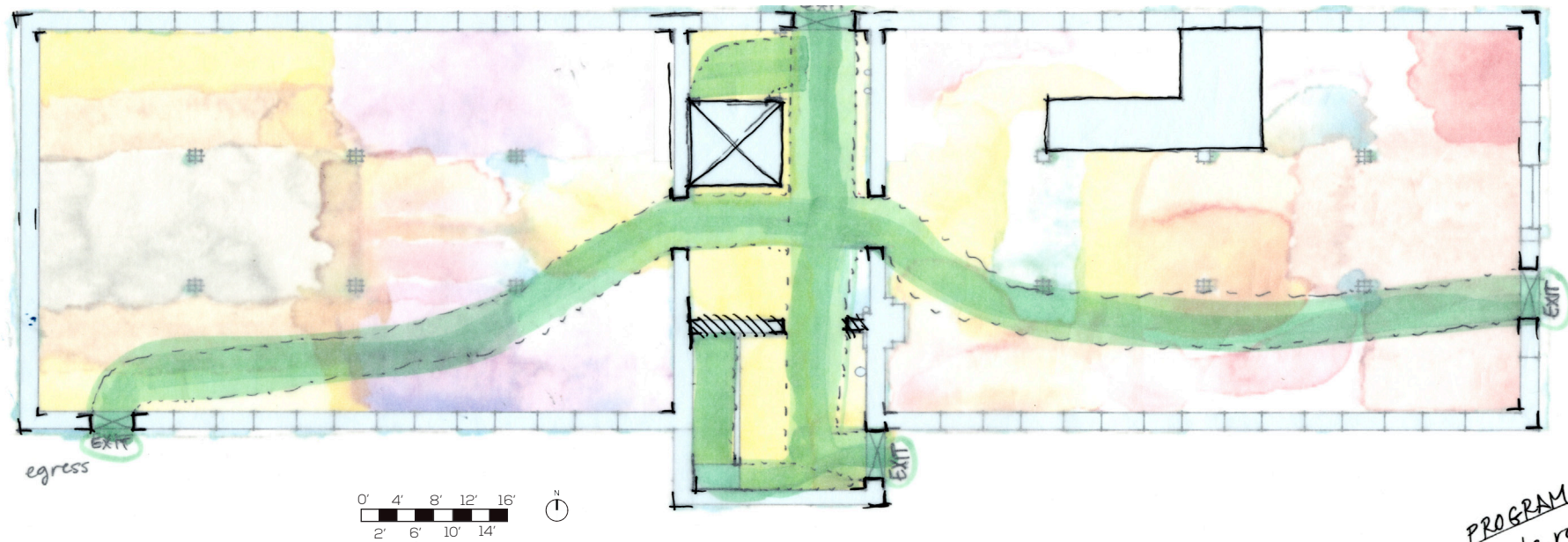
Flow Diagram

After completing
a few preliminary
space plans,
several issues
arose which
still needed
resolution.

This sketch
overlay allowed
me to more
closely study
the flow of the
space and create
a parti diagram
for placing my
program within
the existing
building while
still maintaining
the notion of
the ritual and
the processional
pathway.



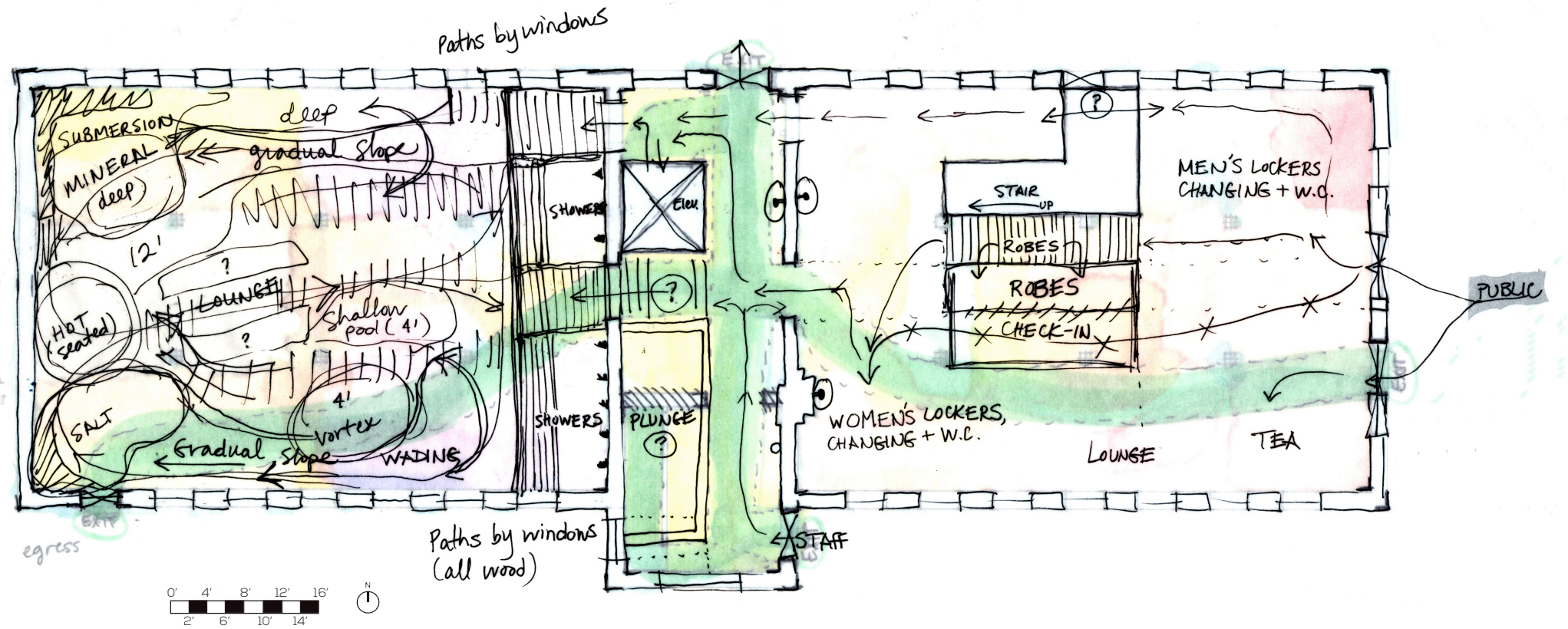
Parti Diagram



SPACE PLAN

- PROGRAM:**
- Robe room + check in
 - w.c.'s, changing, lockers
 - vortex
 - mineral baths
 - warm salt bath
 - plunge pool
 - hot bath
 - aroma bath
 - drinking fountains + tea
 - processional pathways

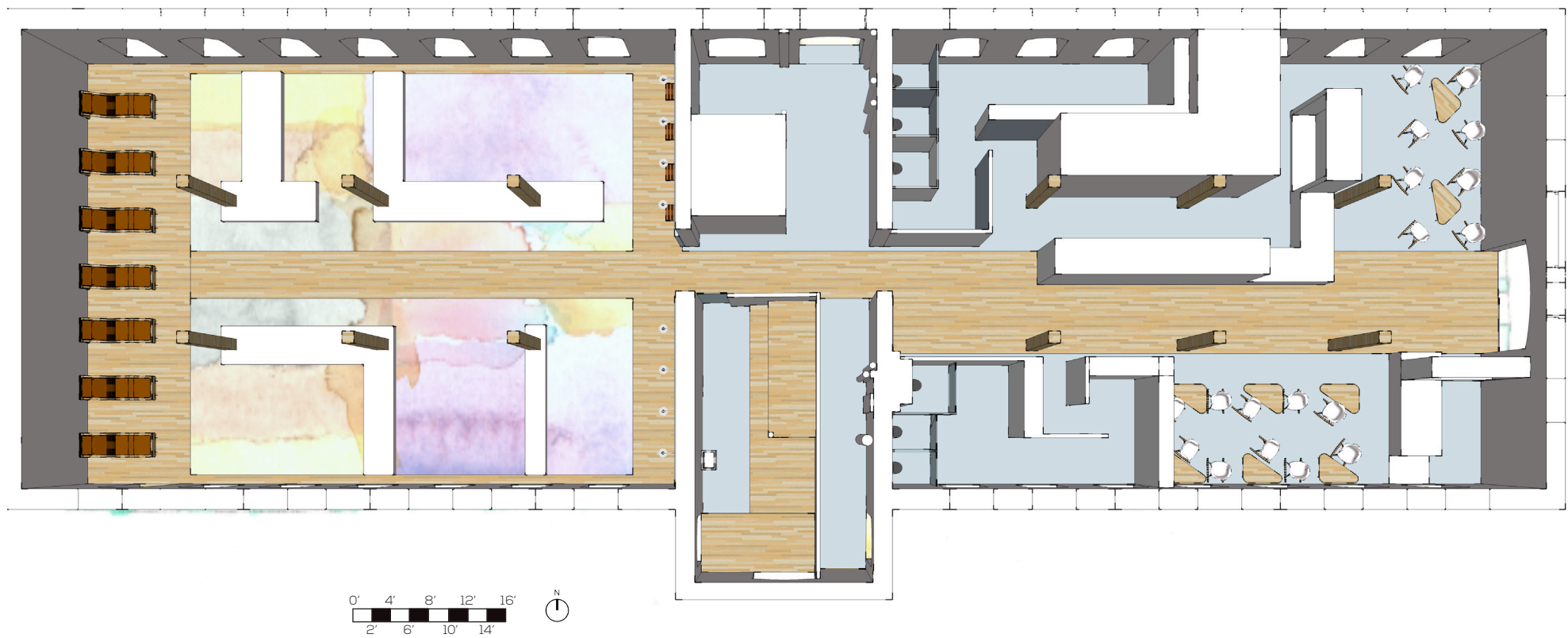
Circulation Exploration Sketch



Circulation Exploration Sketch

This sketch allowed me to further develop the idea of the processional pathways through the entire program.

After completing and studying this sketch, it became clear that my program needed to be simplified in order to maintain the primary axis of the processional pathway through the space and into the pools.

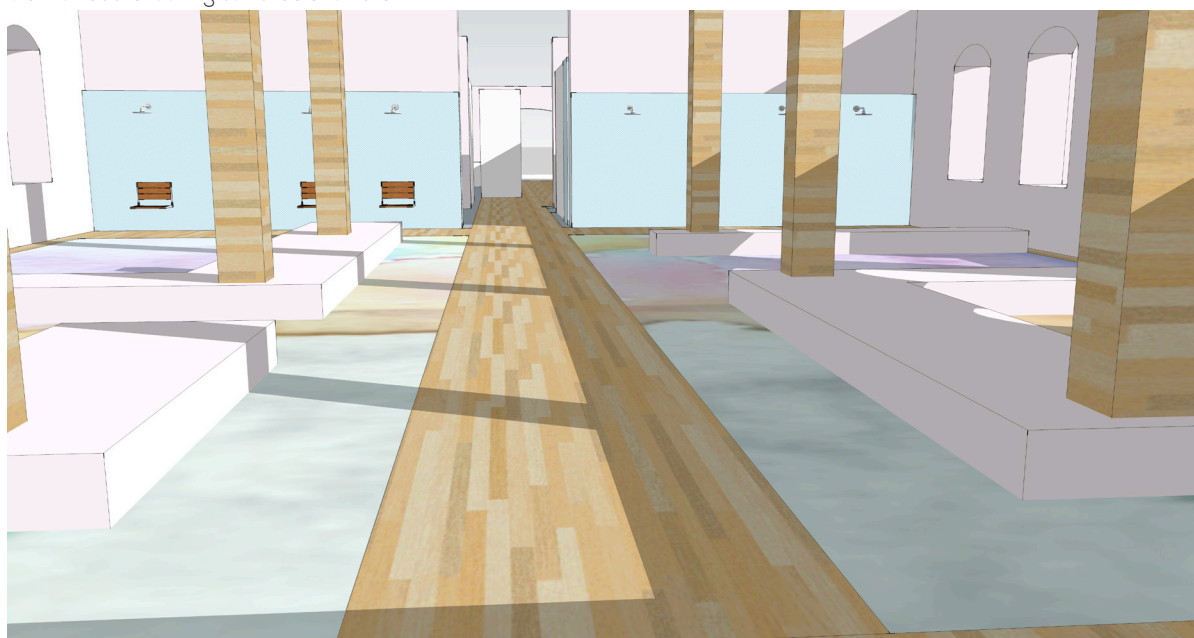


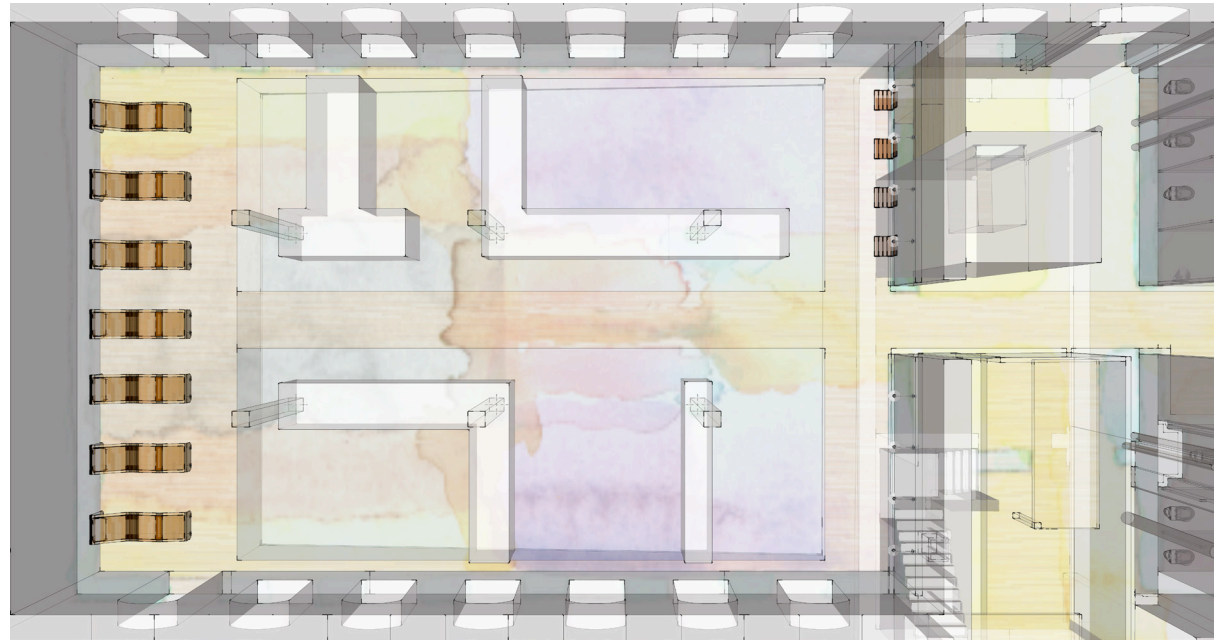
Preliminary Space Plan 3



View of tea area and main entry

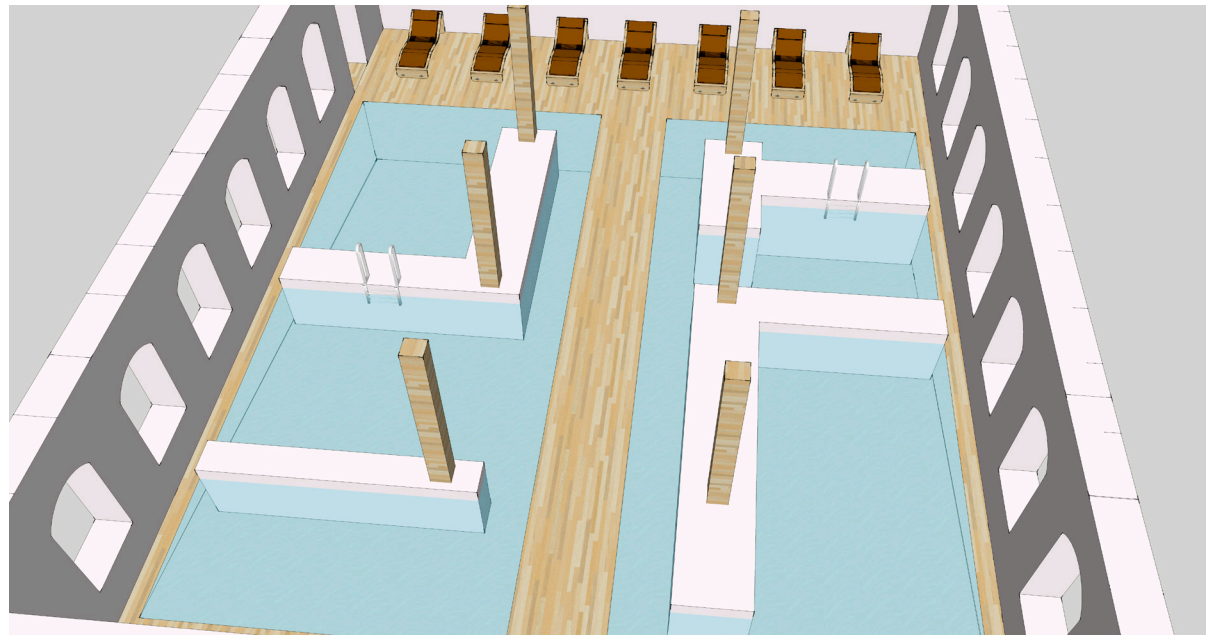
View of baths looking towards showers

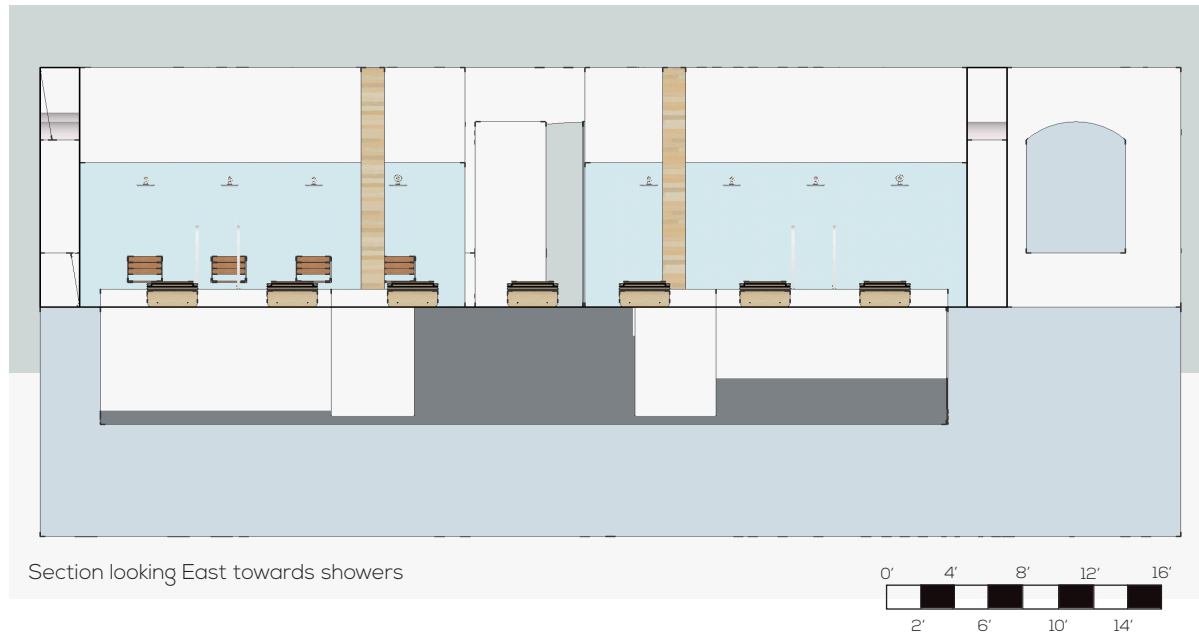




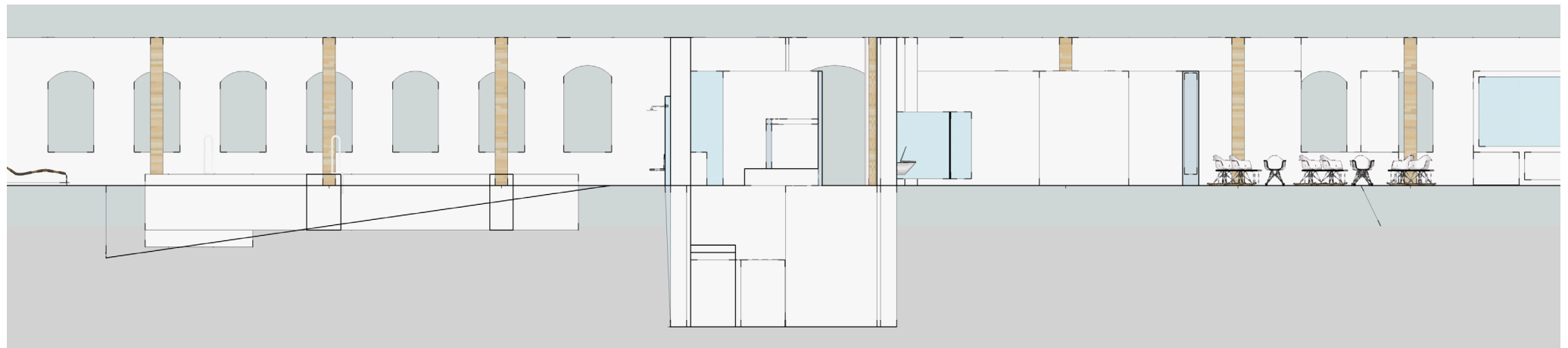
Xray Aerial View of baths

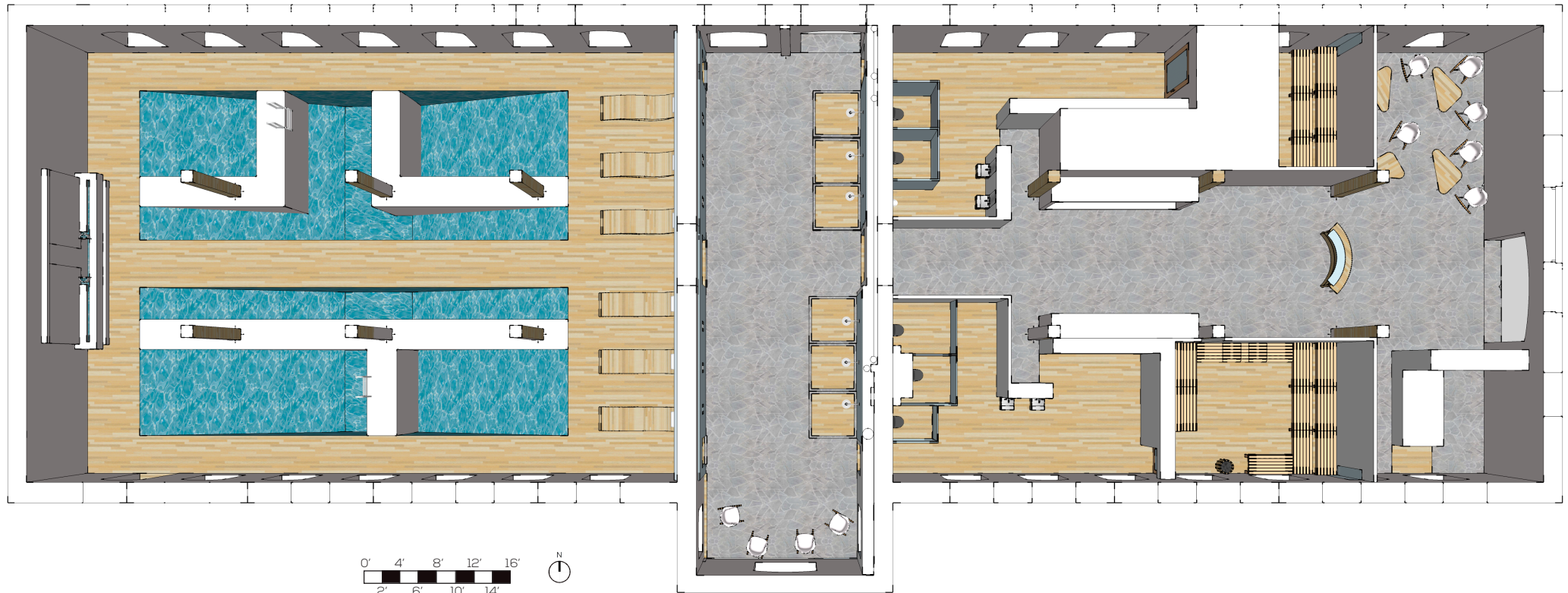
Bird's Eye View of baths



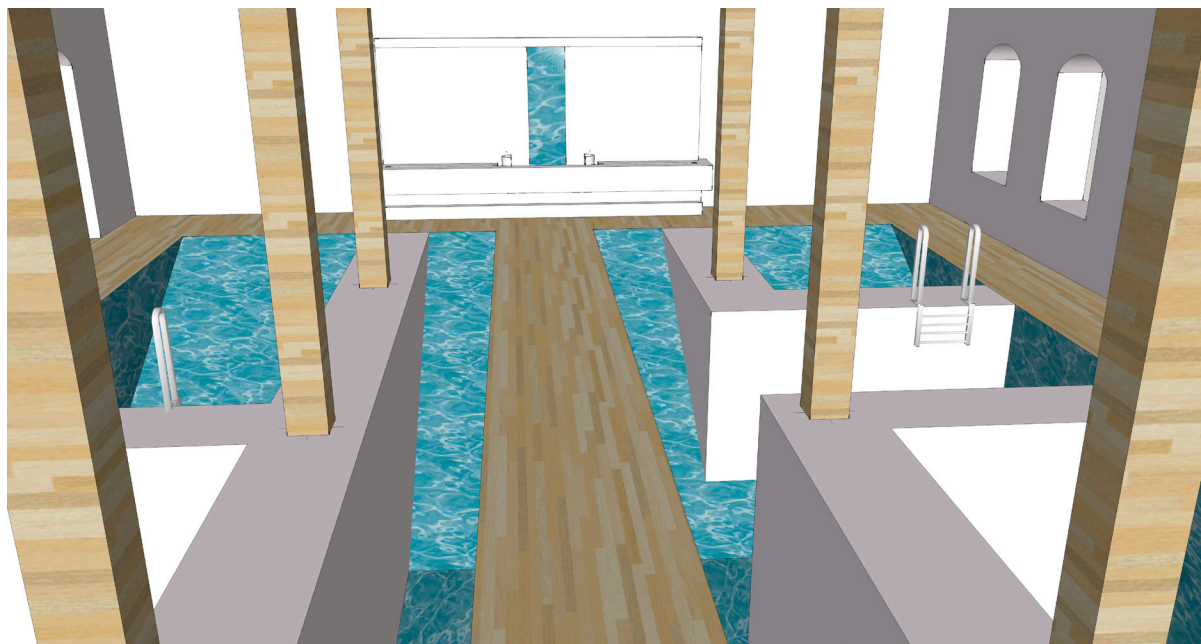


Section looking North through baths and tea area





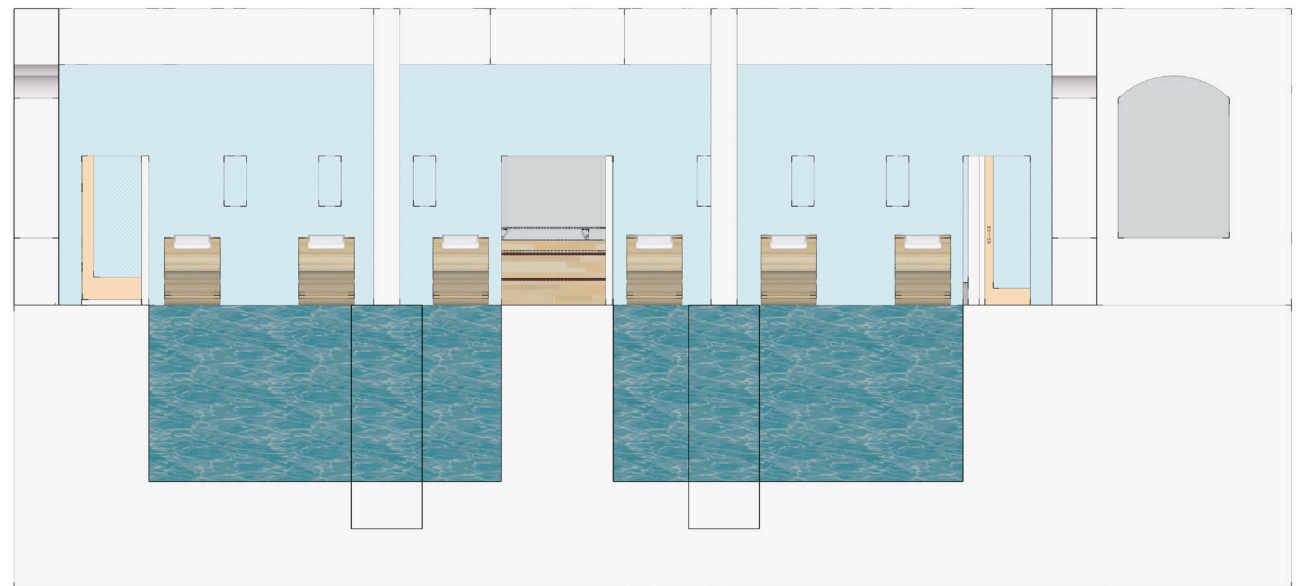
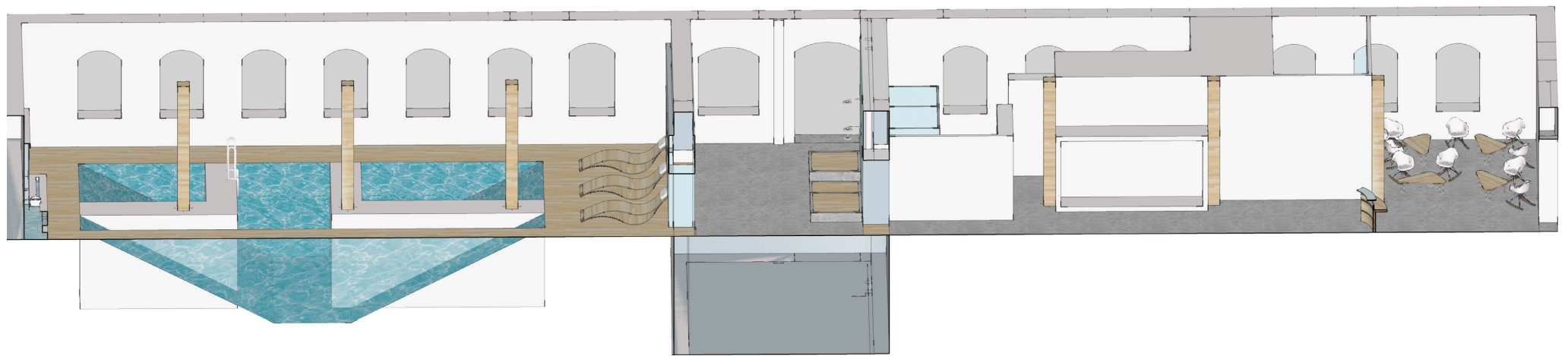
Preliminary Space Plan 4



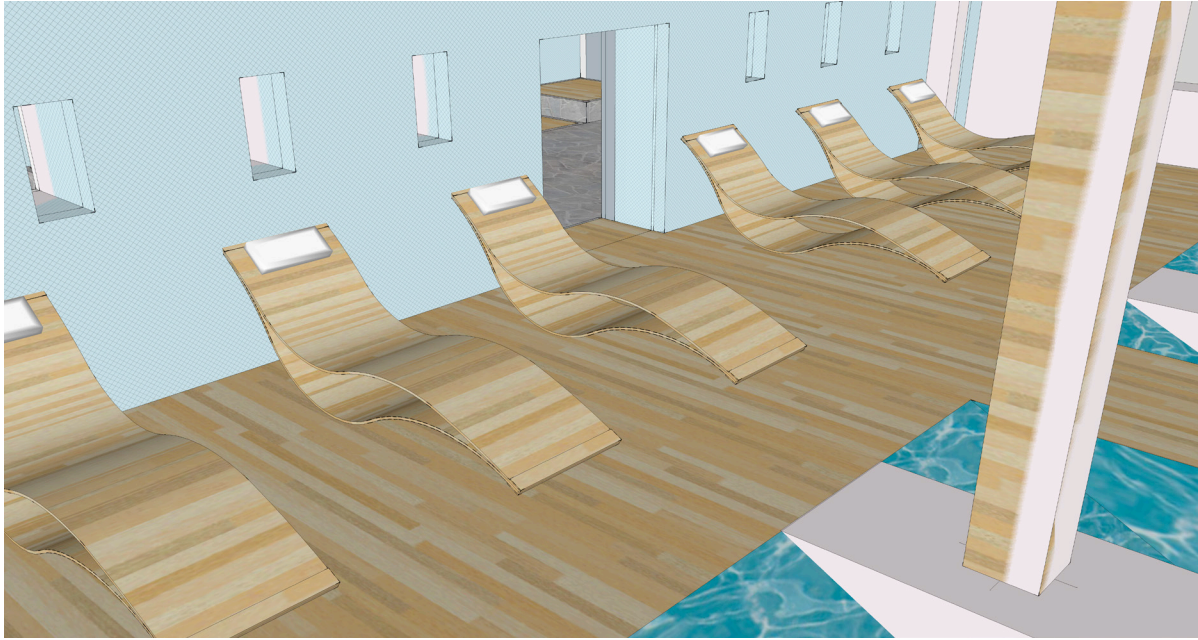
View of pools + drinking fountain

View of showers



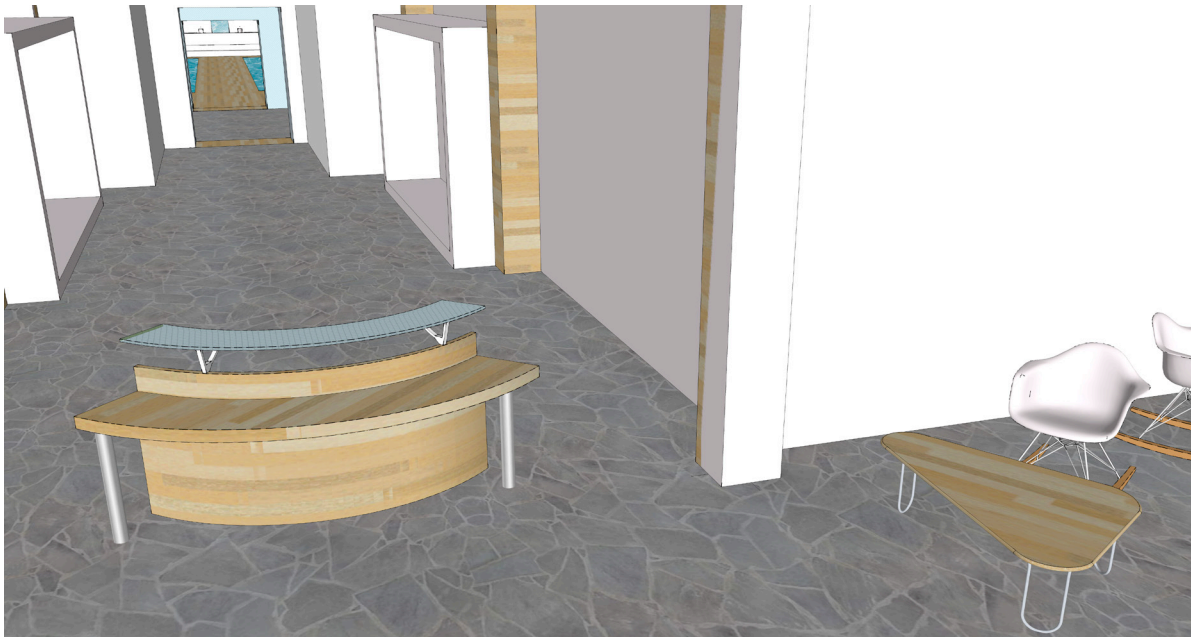


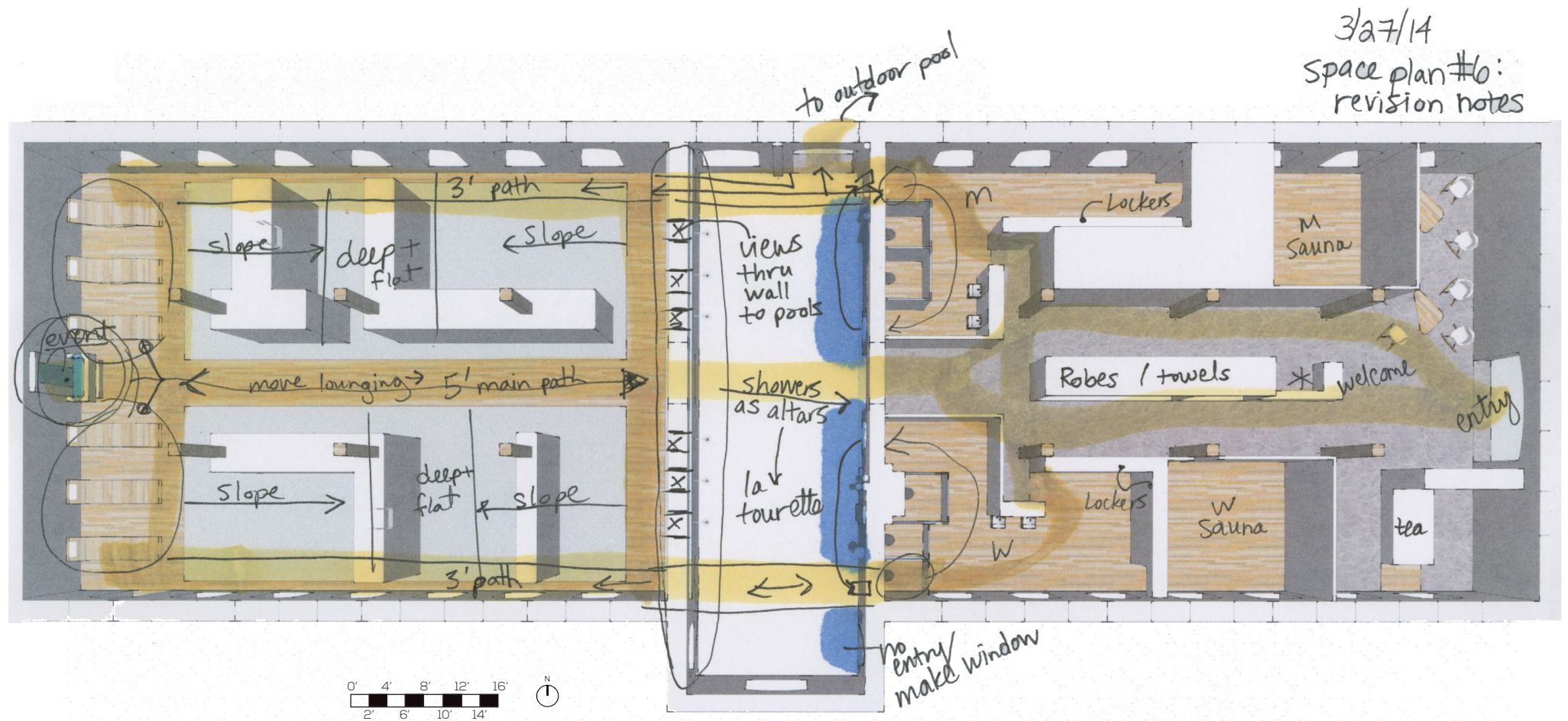
Preliminary Space Plan 4: Sections



View of Lounging

View of Entry

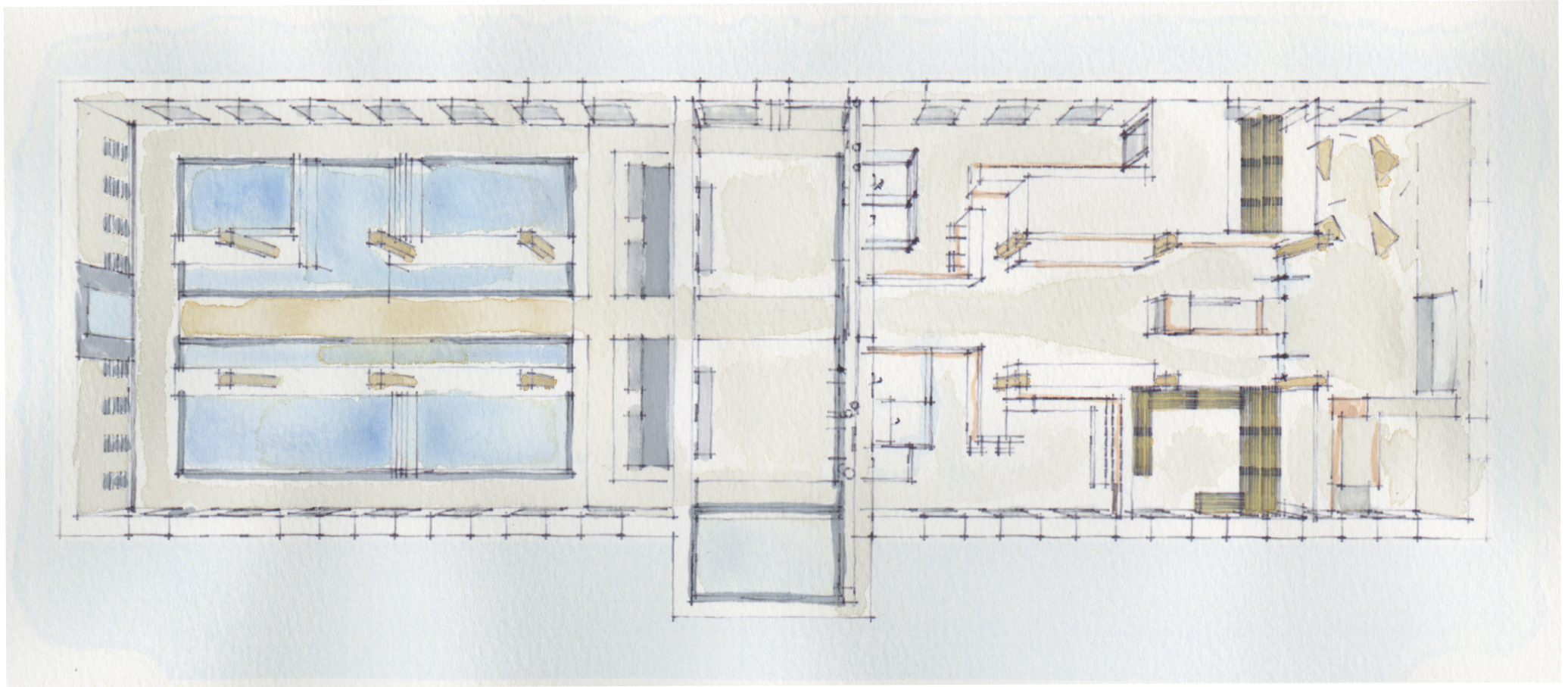




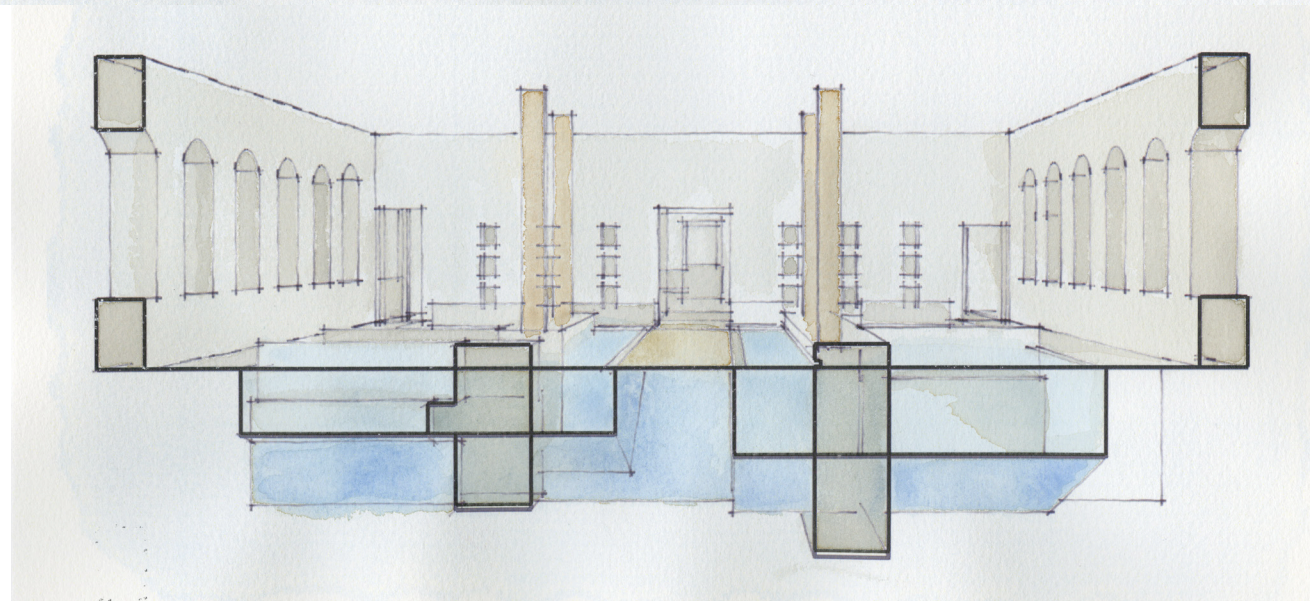
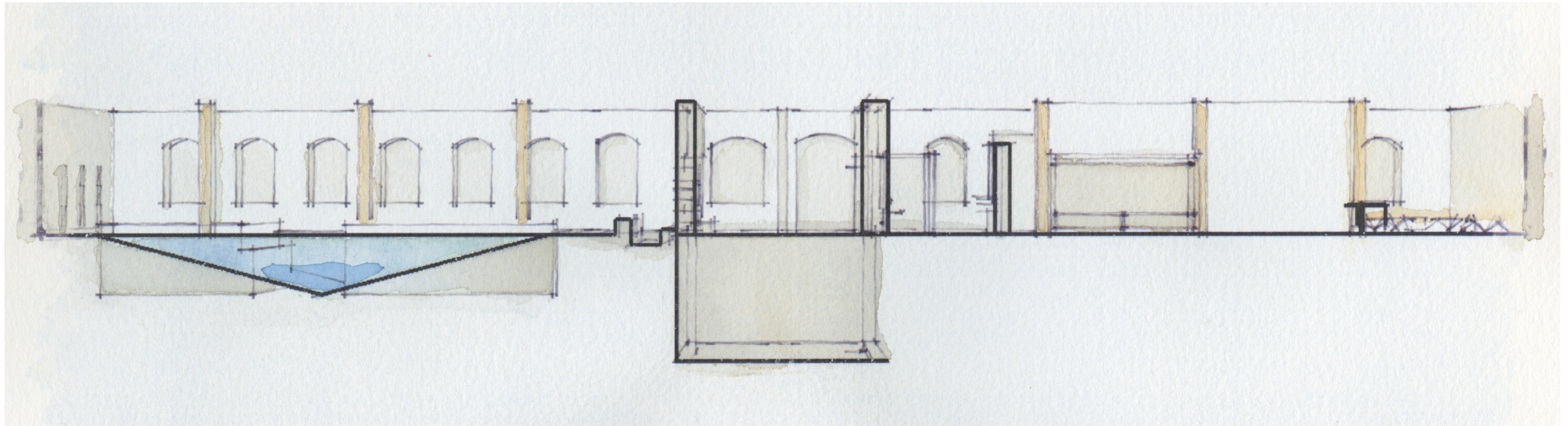
Space Plan Revisions Sketch

This sketch was an exploration on the creation of more efficient circulation from changing areas to and around pools.

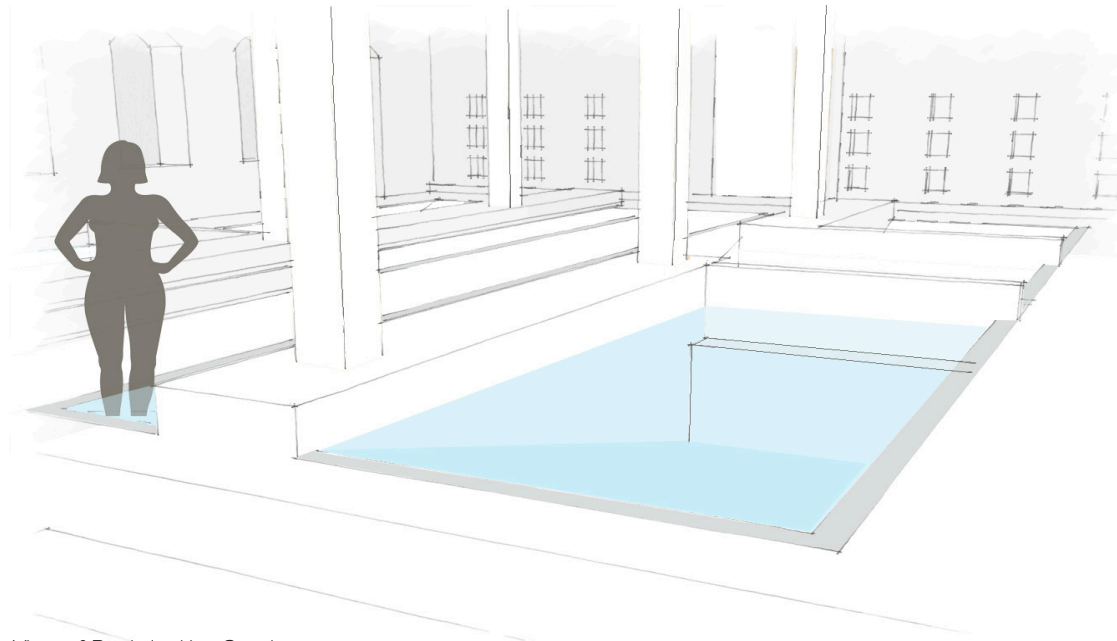
This diagram also pushed me to consider the showers as a more significant aspect of the program while maintaining sight lines to the pools.



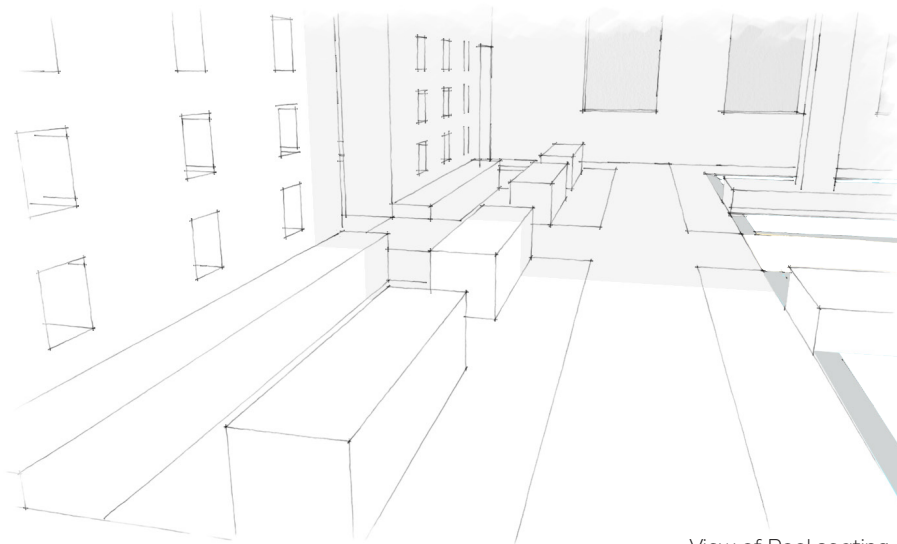
Final Space Plan 5



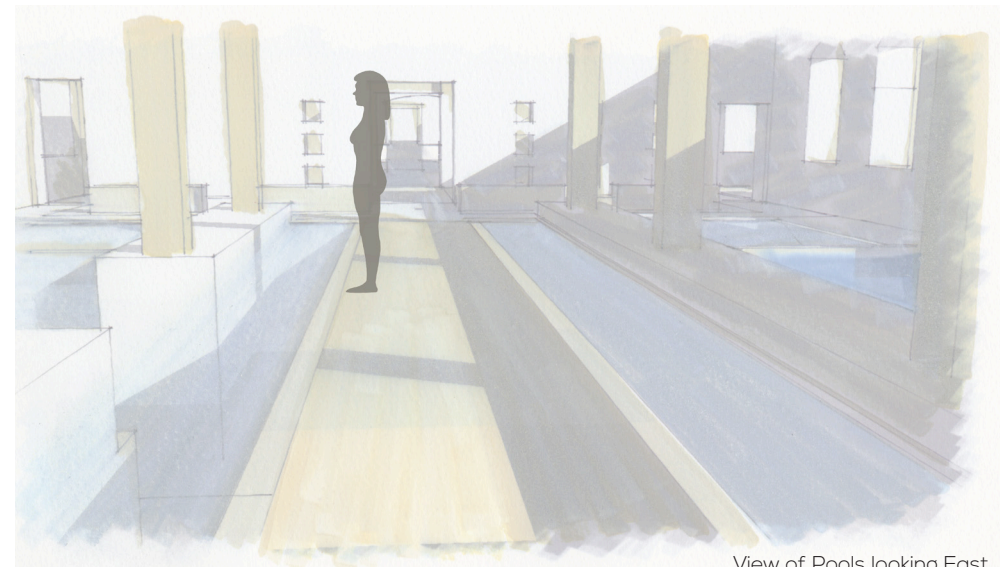
Final Sections



View of Pools looking Southwest

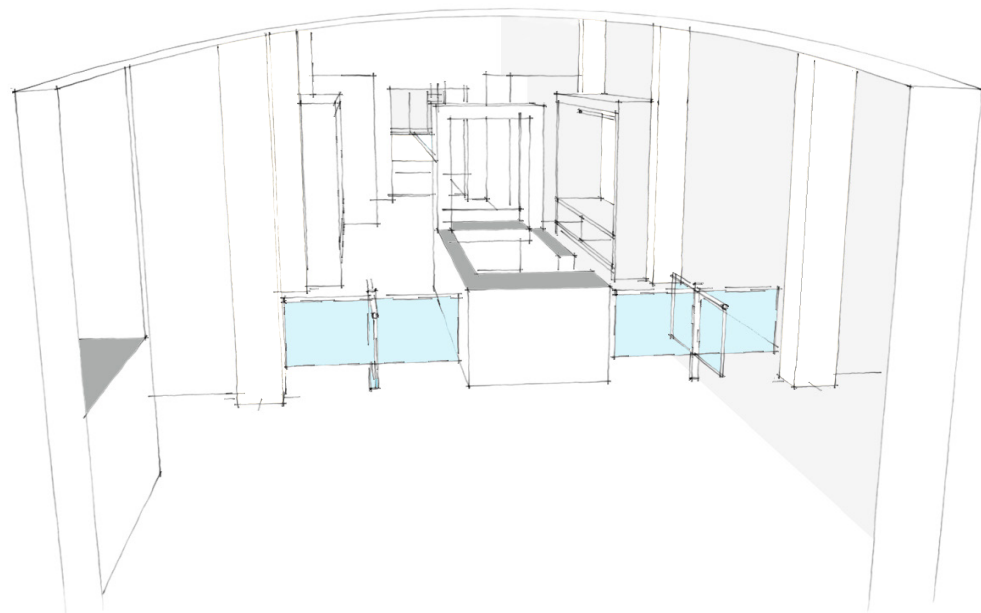


View of Pool seating

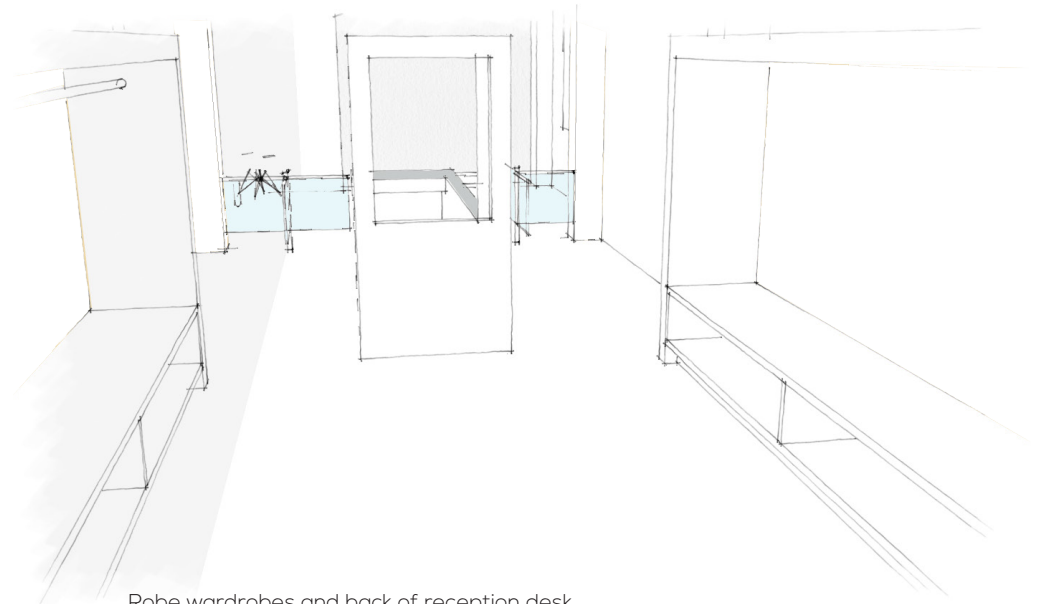


View of Pools looking East

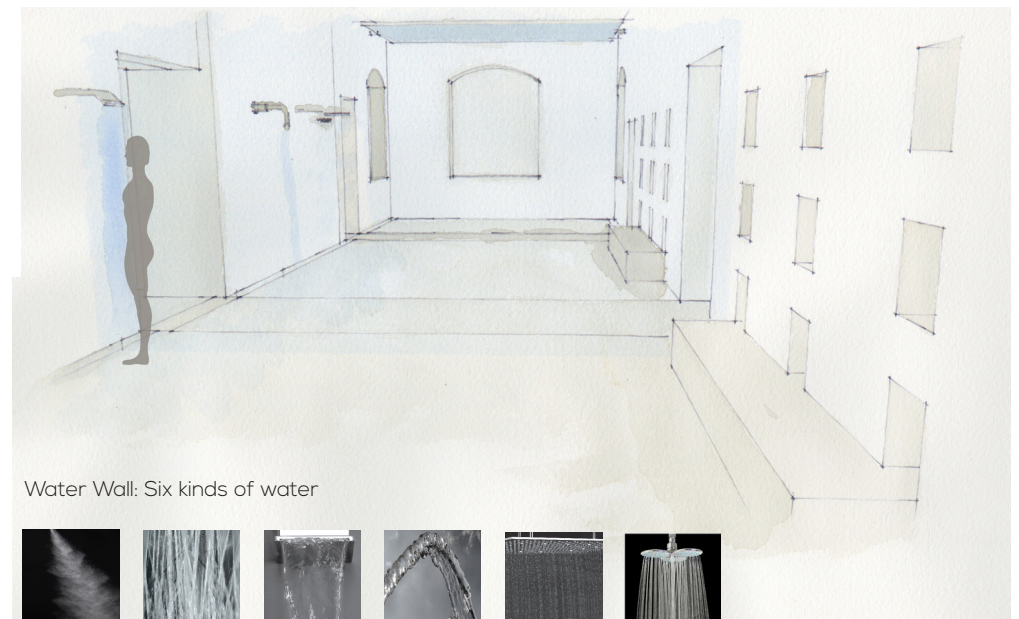
Final Perspectives



Entry and Turnstiles



Robe wardrobes and back of reception desk



Water Wall: Six kinds of water

FINISHES, LIGHTING, + FURNITURE



MATERIAL + COLOR PALETTE



The inspiration
for the lighting
design over the
pools comes from
several sources.

The primary
influence
comes from
Bruce Munro's
Light Shower
installation of
raining LED bulbs.

Similarly, Moritz
Waldemeyer's
"My New Flame"
LED installation
creates a rain-
shower effect.

I would like to take
this rain-shower
effect and create
an implied plane
over the pools
similar to Kenga
Kuma's pool
lighting in "The
Opposite House"
installation.



29



30



32



31





Afillia ESP Hanging

A concept borrowed from botanical science to define its nature and reveal its intimate essence: the new collection of lamps for exnovo by Alessandro Zambelli takes its name from AFILLIA, in nature a plant without leaves. Emptiness and fullness, strength and lightness: space and its paradoxes. Rarified materials - the vacuum crosses between them - to create compact auras; air and light as true 'building components' of the object. And further, beauty and rationality, tradition and innovation: the old story of materials used in combination with the innovative technology of sintering.

cod

designer Alessandro Zambelli

collection .exnovo

More info

series: **Afillia**

category: **lamps**

type: **hanging**

materials (shade \ structure): **laser sintered polyamide \ pine wood**

colours (shade \ structure): **white \ wood**

max. dimensions: **16x34x7cm**

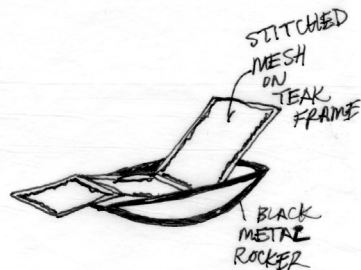
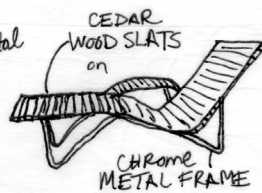
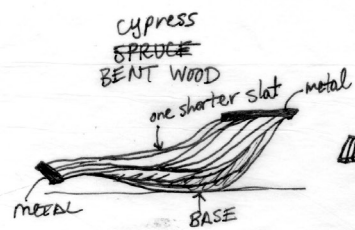
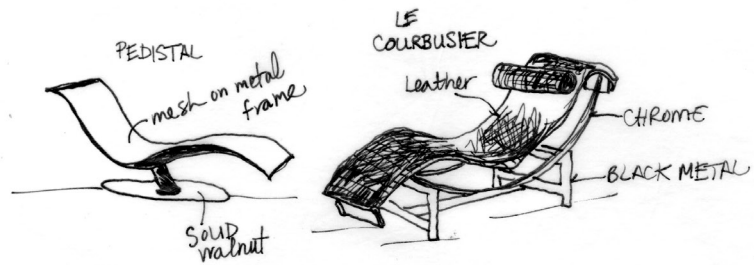
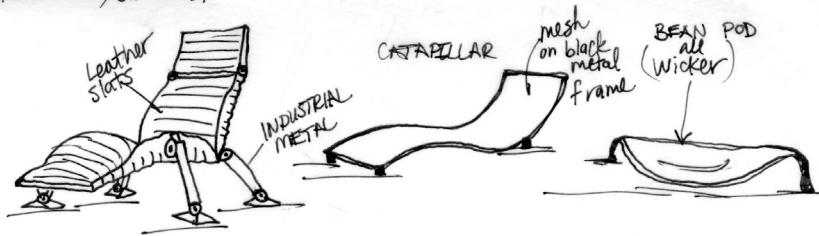
weight: **0,3 Kg**

electrical components: **tissue cable SPT2, 2x0,75**

bulb: **LED 3.5Watt 4000°k 350mA 420Lumen**

SEATING INSPIRATIONS

GRASSHOPPER/BULLDOZER







Rocking Chair By Charles and Ray Eames

Price Upon Request

A great example of the Eames's iconic rocker, having an organically-shaped parchment-colored shell resting on cross-braced steel struts that are attached to birch runners.

CREATOR:	Charles and Ray Eames (Designer), Herman Miller (Manufacturer)
OF THE PERIOD:	Mid-Century Modern
COUNTRY:	United States
DATE OF MANUFACTURE:	1960s
MATERIALS:	Fiberglass, steel and birch
CONDITION:	Good
WEAR:	Wear consistent with age and use
HEIGHT:	26 in. (66 cm)
WIDTH:	24.25 in. (62 cm)
DEPTH:	24 in. (61 cm)
DEALER LOCATION:	NY, NY
NUMBER OF ITEMS:	1
REFERENCE NUMBER:	LU89031085130

WYETH

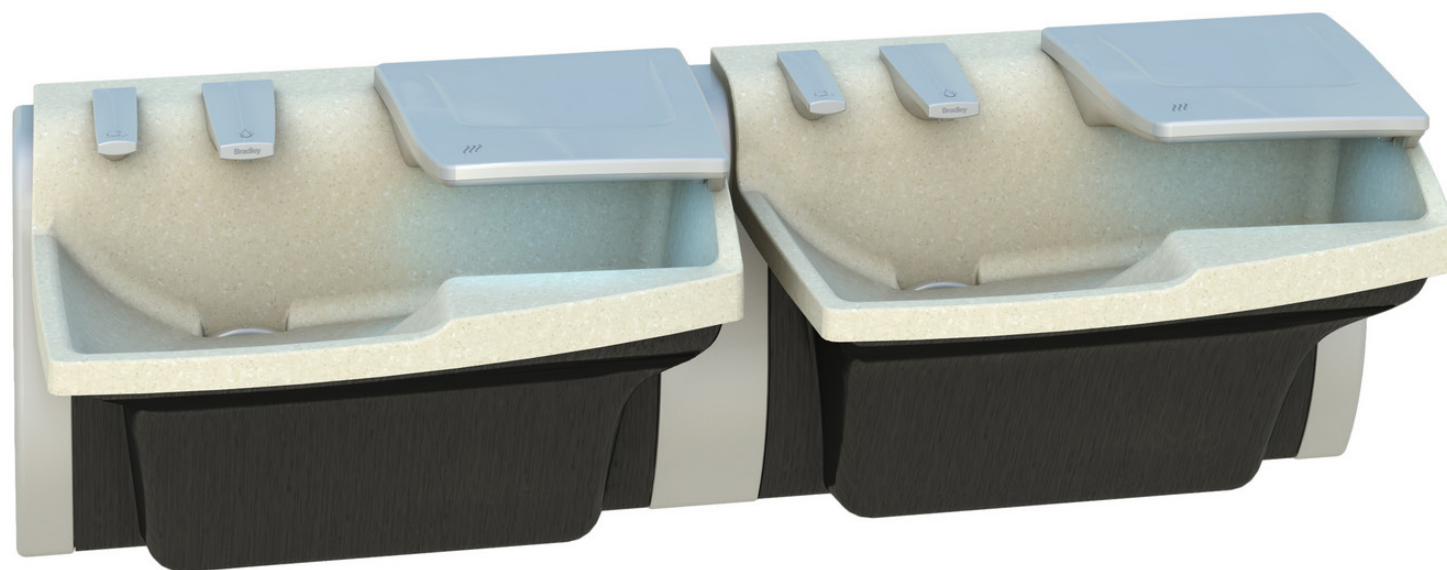
WYETH

315 Spring Street
NY, NY, 10013
212-243-3661

Dealer Reference Number: No. 4826.003



With 1stdibs, you can always
collect with confidence.



37

RESTROOM SINKS: SOAP, WATER, + HAND DRYER ALL IN ONE



Advocate® Lavatory System – AV-Series

AV60

38

- Soap, water and hand dryer, unique all-in-one patent pending design
- Includes infrared, high speed, dual-sided hand dryer at each hand washing station
- Includes large capacity, top-fill, infrared soap dispenser, with low level indicator and one-of-a-kind overflow protection
- Includes hygienic hands-free infrared, .38gpm faucet
- Constructed of Terreon® Solid Surface Material
- Soap, faucet and dryer are pre-mounted to basin
- Meets International Codes & Standards

Specifications

The Advocate Lav System's unique all-in-one design allows users to access soap, water and a hand dryer without leaving the hand washing station. This provides personal space and helps to prevent water from dripping off hands and on to the floor, making cleaning and maintenance easier while providing a safer restroom environment. The AV-Series features a solid surface one-of-a-kind integral bowl. This system can be mounted at different heights to accommodate hand washing for adults, children, young children and those with disabilities.

Construction

Bowl

Constructed of Terreon, a densified solid surface material composed of polyester resin or Terreon®RE, a densified solid surface material composed of a bio-based resin and preconsumer recycled granules. Terreon and TerreonRE are resistant to chemicals, stains, burns and impact. Surface damage can be easily repaired with everyday cleansers or fine grit abrasives. Terreon and TerreonRE are certified by NAHB to meet ANSI Z124.3, Z124.6 and ANSI/ICPA SS-1-2001. Terreon and TerreonRE are GREENGUARD® certified as low-emitting materials.

Trap Cover Enclosure

The trap cover of the Advocate lav system not only conceals plumbing and electrical connections, but also reduces time needed for installation and maintenance. Trap cover is made from Class A fire-rated polystyrene. Trap cover color: Coal.

End Panel

The end panels are deep drawn 18 gauge stainless steel. Stainless steel is polished 300 series with a #3 finish. End panels have internal stud welds for mounting to stainless steel frame described below.

Mounting Frame

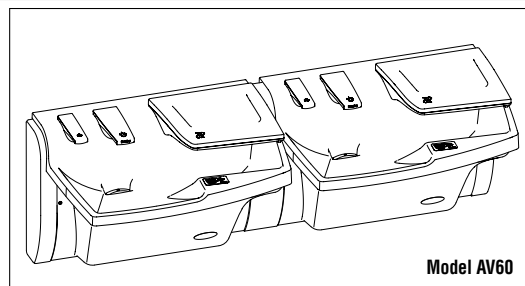
The AV-Series includes welded 18 gauge stainless steel mounting frame with 14 gauge basin supports, eliminating the need for additional specifications and/or casework to support the fixture. All Advocate Lavatory Systems meet or exceed industry standards for load testing.

Faucet

The faucet sensor uses a collimated infrared transmitting beam as part of a position sensor to detect hands. Range is 4". This creates a specific detection area near the faucet spout. Sensor activates when the user's hands enter the detection area. A timing turn-off delay of 2–3 seconds results in a smooth, controlled hand-washing operation. The Bradley sensor is not affected by varying skin tones or darkness. Sunlight or bright washroom lights (up to 10,000 lux) will not activate the system. The flow is a spray pattern at a rate of .38 gpm.

- Low Voltage Transformer – A Class II, UL/CSA-listed 120/24 VAC or 230/24 VAC, plug-in transformer powers the solenoid valve. The transformer, furnished as standard equipment, plugs into a standard GFCI protected electrical outlet.

Protected by one or more of the following patents: D663, 016; S674,967. Other patents pending.



Model AV60

Valve

24V, 50/60 Hz, 3/8" NPT electronically-activated solenoid valve provides reliable performance since there are few moving parts, and its operation is unaffected by most chemicals and minerals often present in municipal water supplies. Operating water pressure range is 40–100 psi. Flow regulator keeps flow rate constant at all pressures.

Soap Dispenser

Each hand washing station features an electronic liquid soap dispenser within the basin area. This eliminates any soap from dripping on counters or onto the floor, minimizing slip hazards and easy cleaning. Each dispenser features an integral check valve to hold prime for consistent reliable operation. Dispenser is top filled via a tamper resistant flip top cover accessed using a spanner wrench (included). Dispenser is compatible with most liquid soaps. Soap tank capacity is 64oz. (1893ml). The Advocate soap dispenser features built in-overflow protection utilizing an audible chirp that increases in intensity when soap level approaches full. Soap level indicator flashes red when soap is low. The sensor uses a collimated infrared transmitting beam as part of a position sensor to detect hands. Sensor activation range is 2". Intelligent electronics allow a maximum of three activations in a 15-second period, limiting the rate at which soap can be dispensed, preventing waste and deterring vandalism. Sensor can be activated at start up to automatically prime soap dispenser.

Hand Dryer

Each hand washing station features an individual infrared-activated, energy efficient hand dryer. Dryer can be entered from the side immediately after washing hands. This virtually eliminates excess water on the floor. The one-of-a-kind dual-sided dryer features white LEDs to illuminate the dryer cavity while in stand-by mode, and amber LEDs while dryer is active. Dryer sensors can be turned off for 30 seconds while cleaning dryer area. The sensor uses a collimated infrared transmitting beam as part of a position sensor to detect hands. Range is 4". The dual-sided dryer will dry hands in approximately 15 seconds. The dryer nozzles contain antimicrobial protection that inhibits the growth of microorganisms such as bacteria, mold, mildew, and fungus. Dryer motor, located inside the cabinet of the Advocate, has 3' power cord that plugs into a standard 20-amp, 120-volt outlet. Easily accessible filter housing uses standard rigid polyester replacement air filters. Dryer has an on/off disconnect switch. Dryer must be unplugged for any service. Hand dryer requires a dedicated 20 amp circuit, and must be properly grounded. GFI circuit protection is recommended. Hand dryer is UL listed.

AV Dryer Option Code	Voltage/Hz	Watts	Amps	CFM	dB	Plug Type
HD2	120/60	1150	12	69	80	K
HD3	230/50	1150	8.6	70	80	F
HD4	230/50	1150	8.6	70	80	D

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P.O. Box 309, Menomonee Falls, WI 53052-0309
Phone: 800.BRADLEY(800.272.3539) Fax: 262.251.5817
bradleycorp.com



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TOILETS: WALL HUNG, ADA

TOTO® CT708E(G) & CT708EV(G)

Wall-Mounted Flushometer Toilet, 1.28GPF when used with High Efficiency Flushometer Valve

FEATURES

- Wall-mounted outlet
- Elongated front bowl
- Optional SanaGloss® ceramic glaze - SanaGloss glaze prevents debris, and mold from sticking to ceramic surfaces, leading to fewer chemicals and less water in cleaning.

MODELS

- CT708E
Commercial wall-mounted toilet with 1-1/2' top spud inlet, less seat
- CT708EG
Commercial wall-mounted toilet with 1-1/2' top spud inlet, less seat with SanaGloss ceramic glaze
- CT708EV
Commercial wall-mounted toilet with 1-1/2' back spud inlet, less seat
- CT708EVG
Commercial wall-mounted toilet with 1-1/2' back spud inlet, less seat with SanaGloss ceramic glaze
- SC534 seat (sold separately)
- SC134 seat (sold separately)
- THU111 Retro-fit mounting bolt cap set (4 pcs sold separately)

FLUSHOMETER VALVES (sold separately)			
Manual		EcoPower®	
1.28 GPF	1.6 GPF	1.28 GPF	1.6 GPF
TMT1LN32#CP	TMT1NNC-32	TET1LN32#CP	TET1GNC-32#CP
		TET6LN32#CP	TET6GNC-32#CP
		TET3LN#31#SS	TET3GN#31#SS
		TET2LN#31#SS	TET2GN#31#SS

COLORS/FINISHES

- #01 Cotton
- #03 Bone
- #12 Sedona Beige

CODES/STANDARDS

- Meets and exceeds ASME A112.19.2/CSA B45.1
- Certifications: IAPMO (cUPC), State of Massachusetts, City of Los Angeles, and others
- Code compliance: UPC, IPC, NSPC, NPC Canada, and others
- ADA Compliant



SanaGloss

PRODUCT SPECIFICATION

The wall-mounted, low consumption siphon jet flushing system toilet shall be 1.28GPF/4.8LPF when paired with a 1.28GPF flushometer valve and 1.6GPF/6.0LPF when paired with 1.6GPF/6.0LPF flushometer valve. Toilet shall have optional SanaGloss ceramic glaze. Toilet can be mounted at ADA height. Toilet shall be elongated front bowl. Toilet shall be TOTO Model CT708E_____.





TOILETS: WALL HUNG, ADA

FEATURES

- 0.5GPF
- Compact urinal with concealed integral trap
- Washout flush action with 3/4" top or back spud inlet

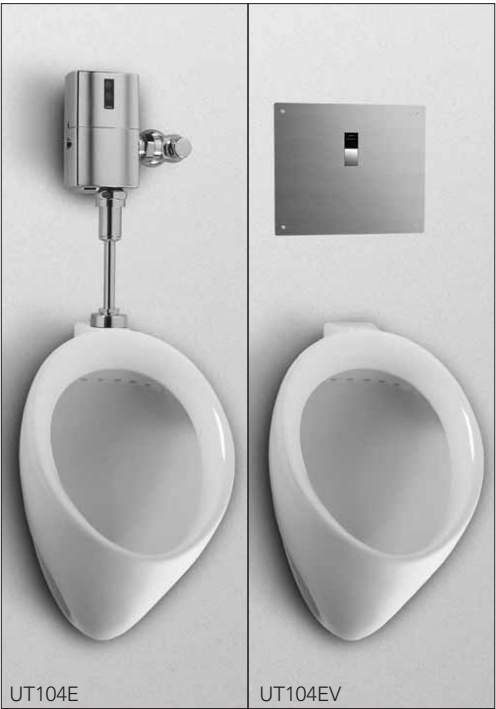
MODELS

- UT104E
Urinal with 3/4" top spud inlet
- UT104EV
Urinal with 3/4" back spud inlet

ADDITIONAL ITEMS (sold separately)

- THU3010
Stainless Steel Urinal Drain Cover

RECOMMENDED FLUSH VALVES		
UT104E		UT104EV
EcoPower®	Manual	EcoPower®
TEU1LN12#CP	TMU1LN12#CP	TEU2LN11#SS
		TEU3LN11#SS



COLORS/FINISHES

- Standard
#01 Cotton
#03 Bone
#12 Sedona Beige

PRODUCT SPECIFICATION

The wall-mounted, ADA compliant, low consumption washout urinal shall be 0.5GPF/1.9LPF when paired with a 0.5GPF flushometer valve and 1.0GPF/3.8LPF when paired with 1.0GPF/3.8LPF flushometer valve. Urinal specified shall be model UT104E_____.

CODES/STANDARDS

- Meets and exceeds ASME A112.19.2/CSA B45.1,
- Certifications: IAPMO(cUPC), State of Massachusetts , City of Los Angeles
- Code compliance: UPC, IPC, NSPC, NPC Canada, and others
- Legislative compliance: California AB715, California Green Building Code
- ADA compliant

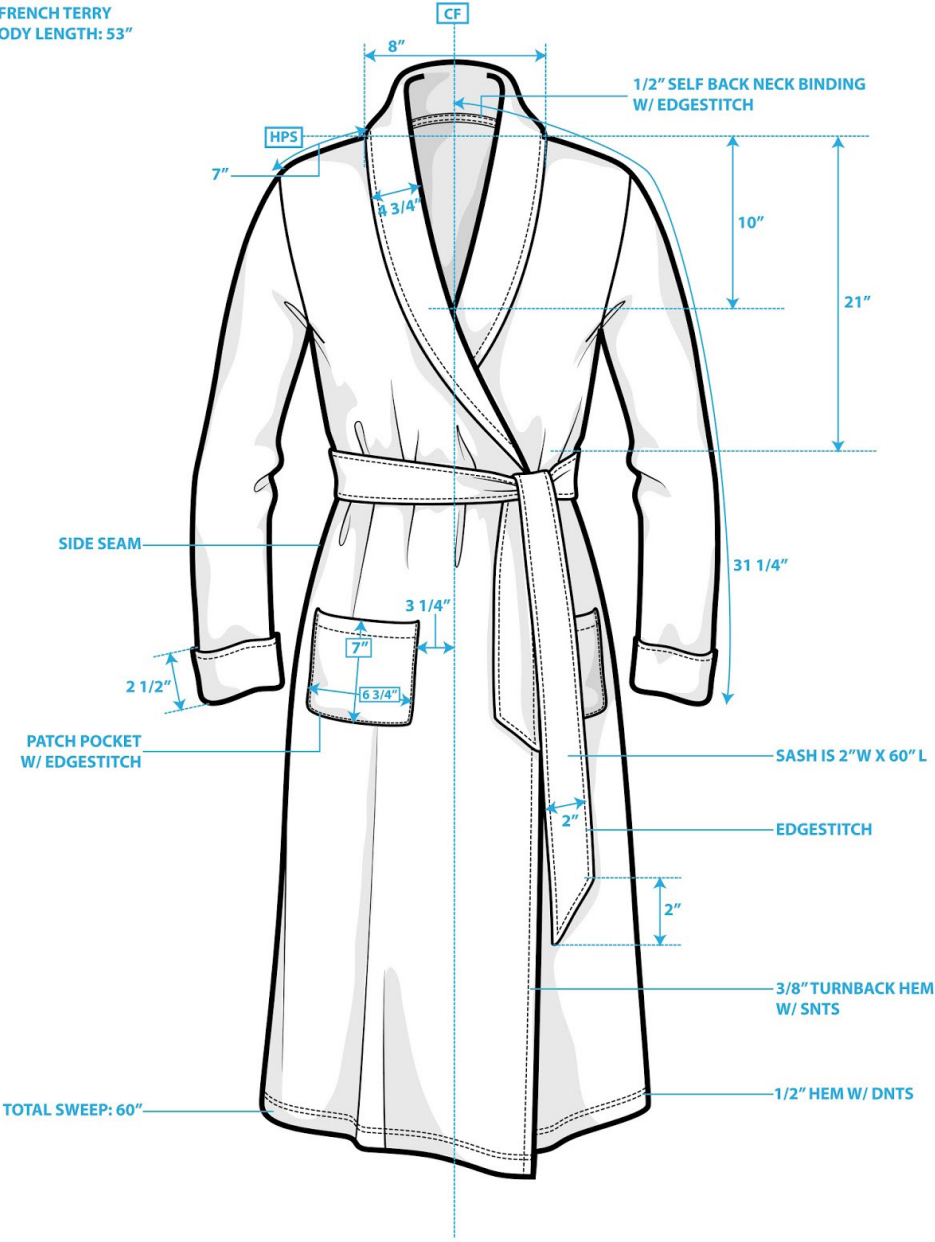




BATHROBES

BATHROBE

FABRIC: FRENCH TERRY
TOTAL BODY LENGTH: 53"





45

Alberene Soapstone, Quarried in Virginia

Tile, Honed on floors (varied sizes + patterns)
Slab, Oiled on countertops (Tea + Reception)

HEATED SOAPSTONE FLOORS



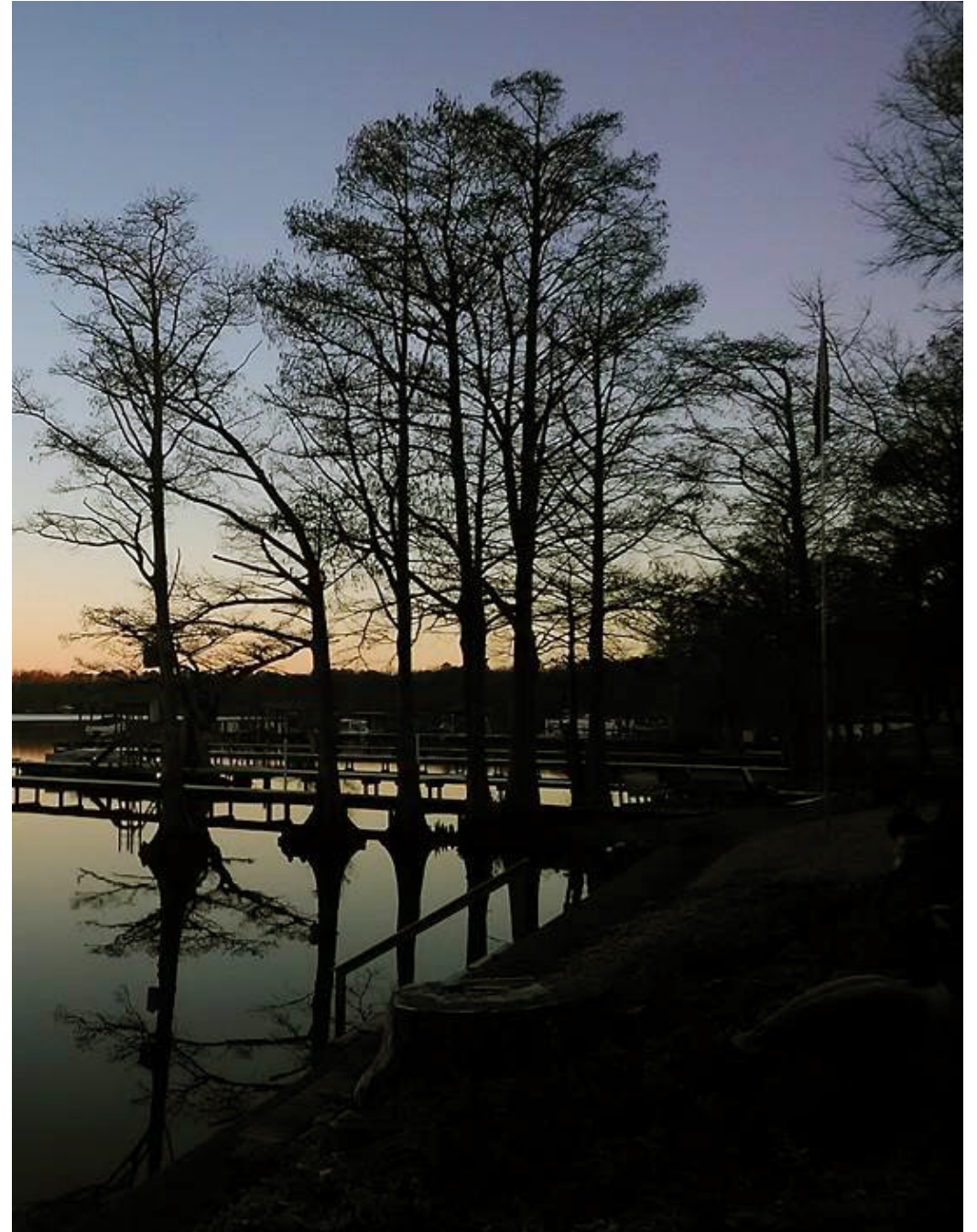


Weathered Cypress sourced
on East Coast, USA

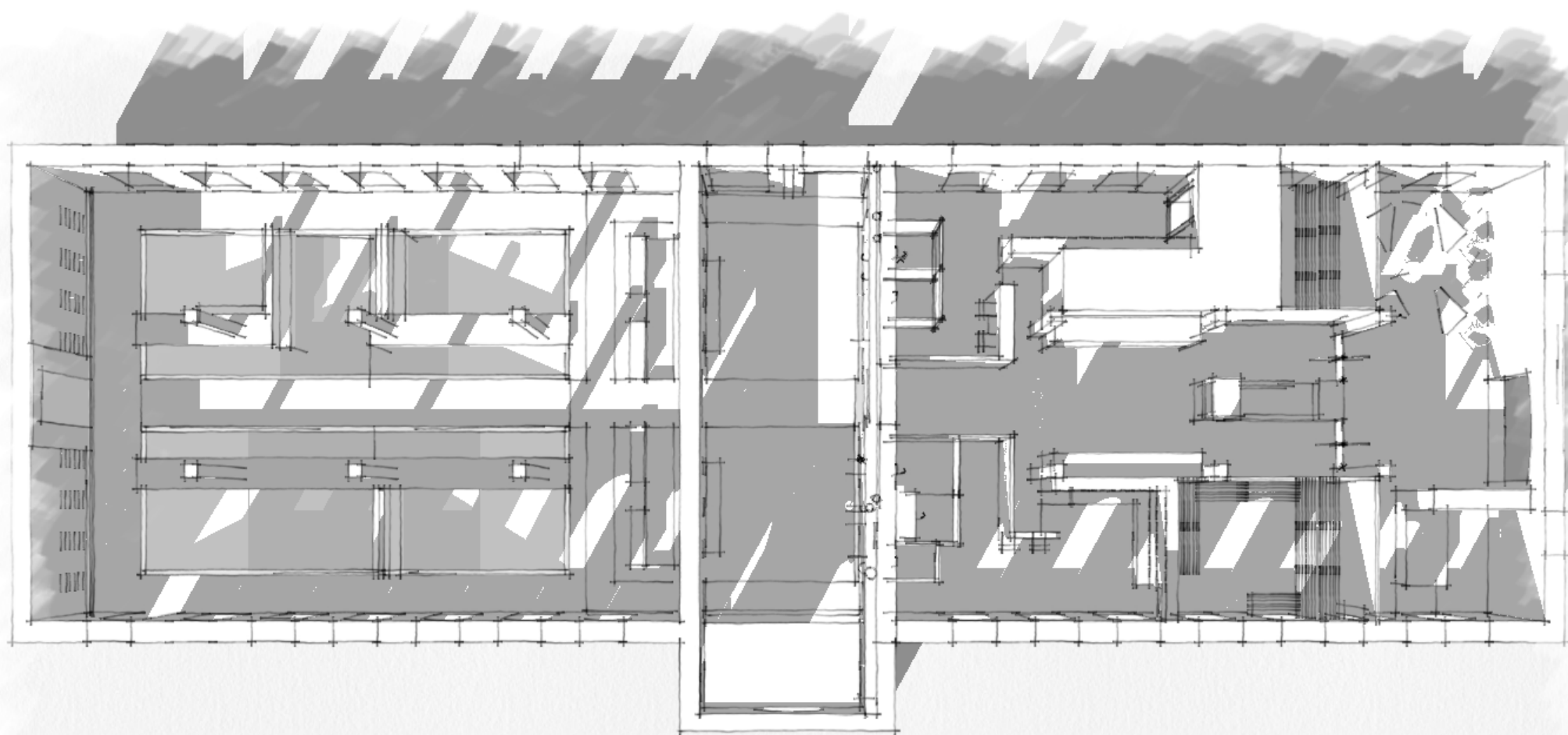
47

Wood benches (Saunas)
Wood tables (Tea)
Wood Bridge (Pools)

WOOD BENCHES



FINAL PRESENTATION BOARDS



ritual, procession, rebirth

site

ITALIANATE Building

R.J. Reynolds Tobacco Co.

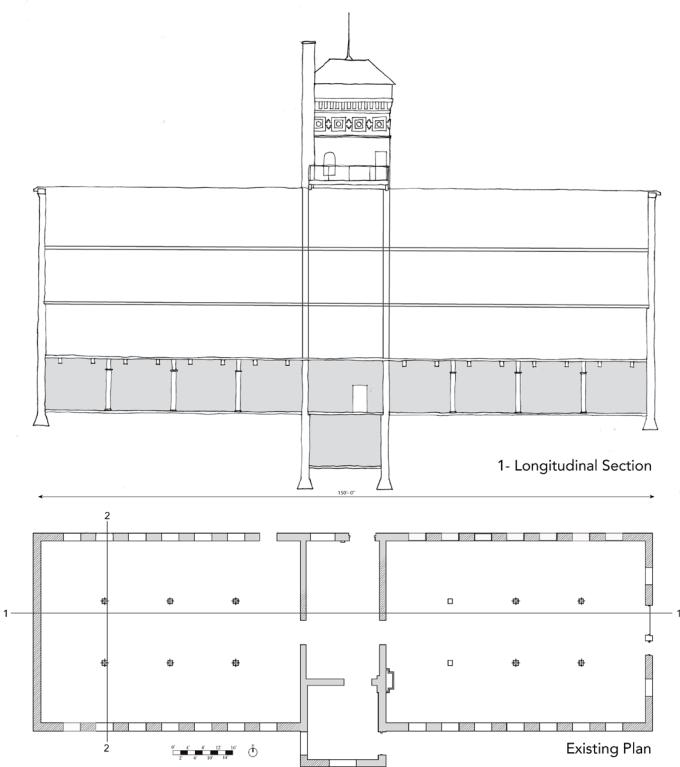
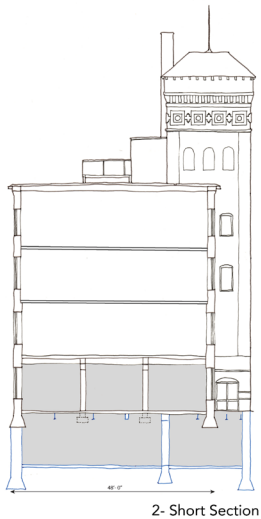
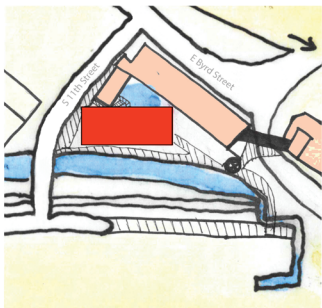
320 South 12th Street, Richmond, Va 23219 at Haxall
Point: art wall across the canal, adjacent to Brown's Island

Site Significance

The Reynolds building is parallel to the canal, which is also parallel to the James River. At this site, water is contained by the built environment within the canal, and also exists in close proximity as a free-flowing and powerful river in its natural form. The public bath embraces this juxtaposition of water as a commodity that is exploited and as a powerful natural force.

This project explores the ritual of leisure, social interaction, and reflection in a democratic space. Water is the universal experience. The program for this site examines the ritual of bathing and the role of intimacy within a public domain.

Water is central to the human experience; from basic survival, to religious ritual to daily routine. Immersed in water, we are stripped of conformities and made vulnerable. Immersion fascinates and invigorates - our potential for rebirth.

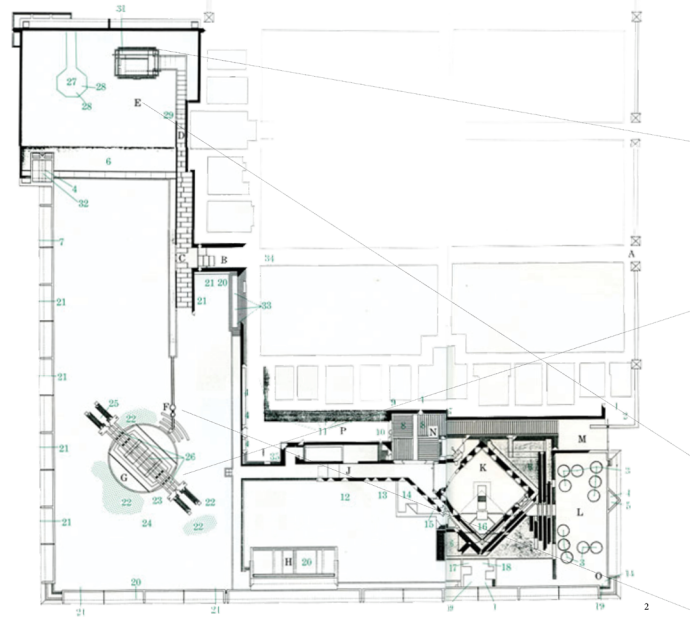


Program	Square Footage
Tea + Lounging	700 SF
Reception + Turnstiles	200 SF
Robes + Towels	300 SF
Changing + Lockers	900 SF
Saunas	400 SF
Showers Mist, Spray, Waterfall, Pour, Rain, Splash	1800 SF
Baths Plunge, Warm, Hot, Wade, Salt, Vortex	1500 SF
Pathways	875 SF
	6675 SF Total

ritual, procession, rebirth

Brion Cemetery by Carlo Scarpa

A case study on connections, details, materiality, and form, especially in terms of vessels to hold water.



Detailed concrete casts juxtaposed against lush nature allow for simultaneous celebration of the man-made and the natural.

San Vito d'Altivole, Italy



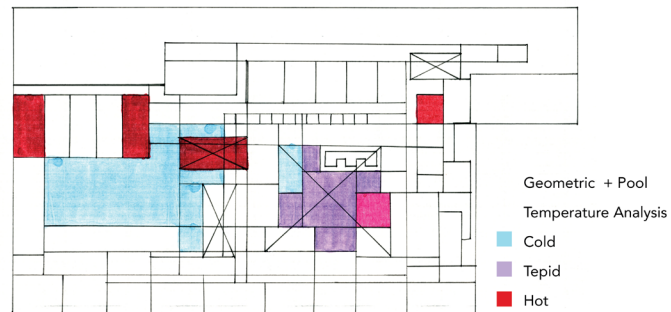
Sensuous
physicality of
concrete forms

Extension +
overlap of
margins

Geometric
architecture
frames +
complements
nature

Sensitivity to transitions + materiality

Therme Vals by Peter Zumthor

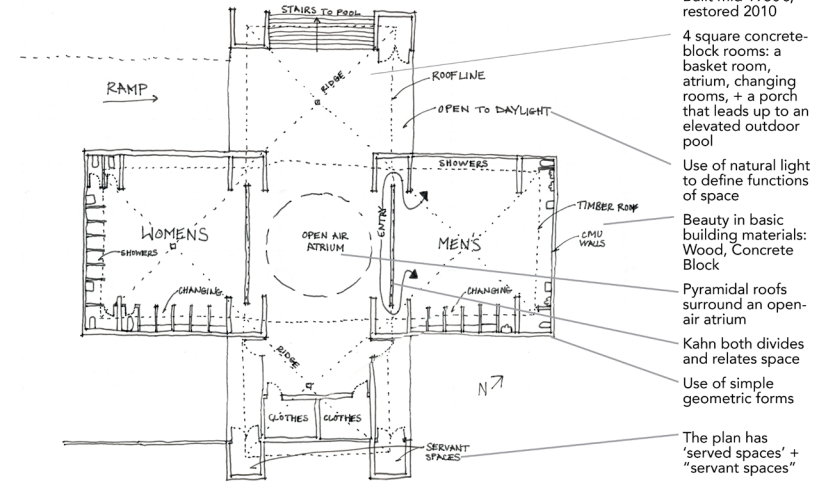


What should the baths
be? through the eyes of
Zumthor

rays of light falling in semi-darkness, illuminated, stone basins, rising steam, immersion, columns "like boulders standing in water," quiet, rooms fading into shadows, "the layers, the infinitely iridescent tones of grey," all the sounds of water, "gurgling voices from the depths," echoing, serene, primeval, meditative, utterly enthralling...

precedents

Trenton Bath House by Louis Kahn



Built mid 1950's,
restored 2010

4 square concrete-block rooms: a basket room, atrium, changing rooms, + a porch that leads up to an elevated outdoor pool

Use of natural light to define functions of space

- Beauty in basic building materials: Wood, Concrete Block

Pyramidal roofs surround an open-air atrium

- Kahn both divides and relates space

- Use of simple geometric forms

- The plan has 'served spaces' + "servant spaces"



In the Trenton Bath House, each⁸ space is isolated, yet related to every other space. There are secondary "servant" spaces and primary "served" spaces.



Louis Kahn believed that buildings have a spirit. He also believed that a room is defined by structure and light.



"Structure, which gives the light." -Louis Kahn



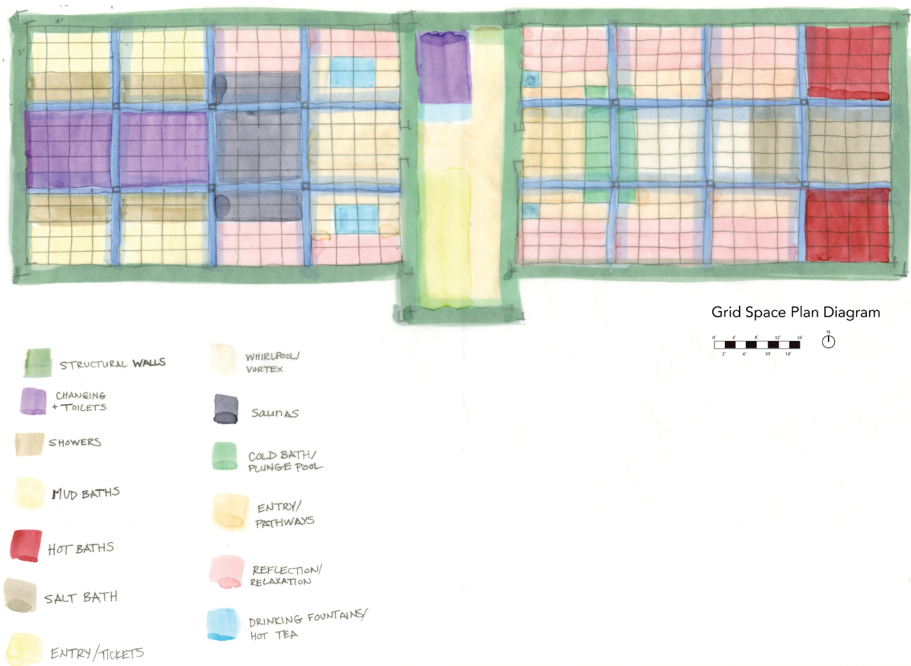
Discovery, play +
reflection

Sumptuous elemental materials

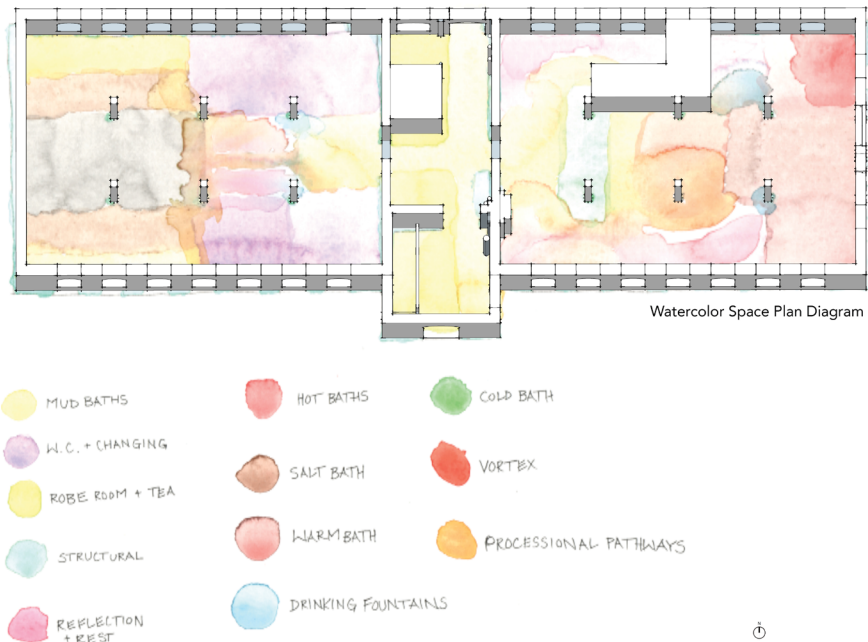
Hidden crevices and niches

Carving out and building up

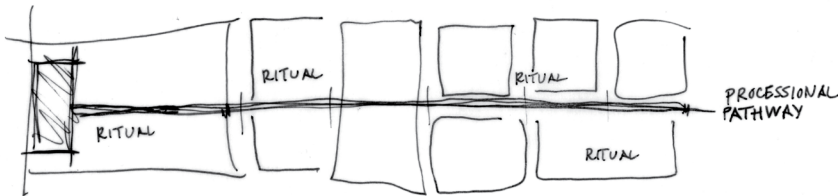
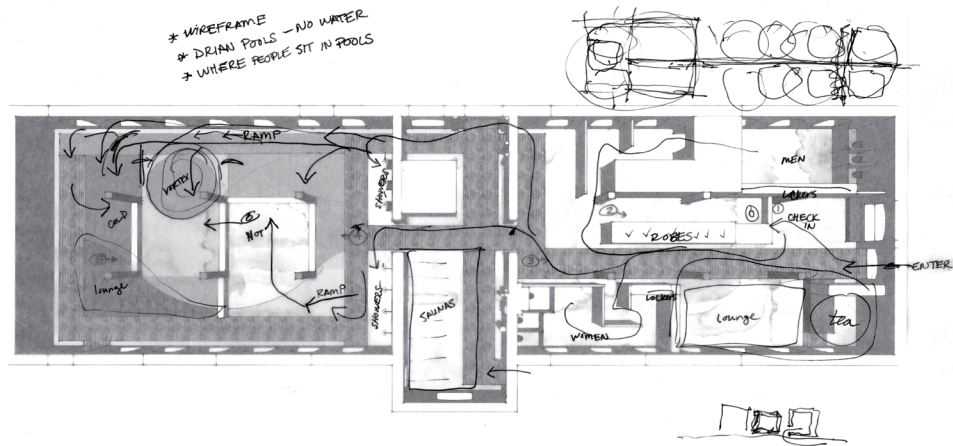
ritual, procession, rebirth



A strong structural grid and primary axes formed by the columns on the first floor guided the preliminary space plans. Using the grid as a primary driver in space planning proved to be too rigid for the program.



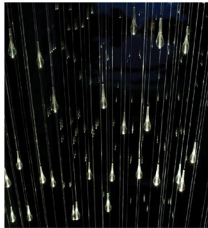
The introduction of watercolor allowed for a more fluid approach to space planning, while referring back to the grid allowed for verification of correct proportions and assisted in the development of a space plan that both respected the existing uniform structure of the grid and allowed parts of the program to overlap and flow into one another.



The sketch overlay on the left allowed me to more closely study the flow of the space and create a parti diagram (above) for placing my program within the existing building while still maintaining the notion of the ritual and the processional pathway.

ritual, procession, rebirth

finish plan



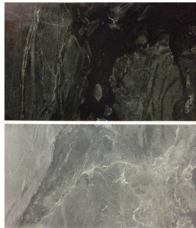
Munroe LED Light Shower



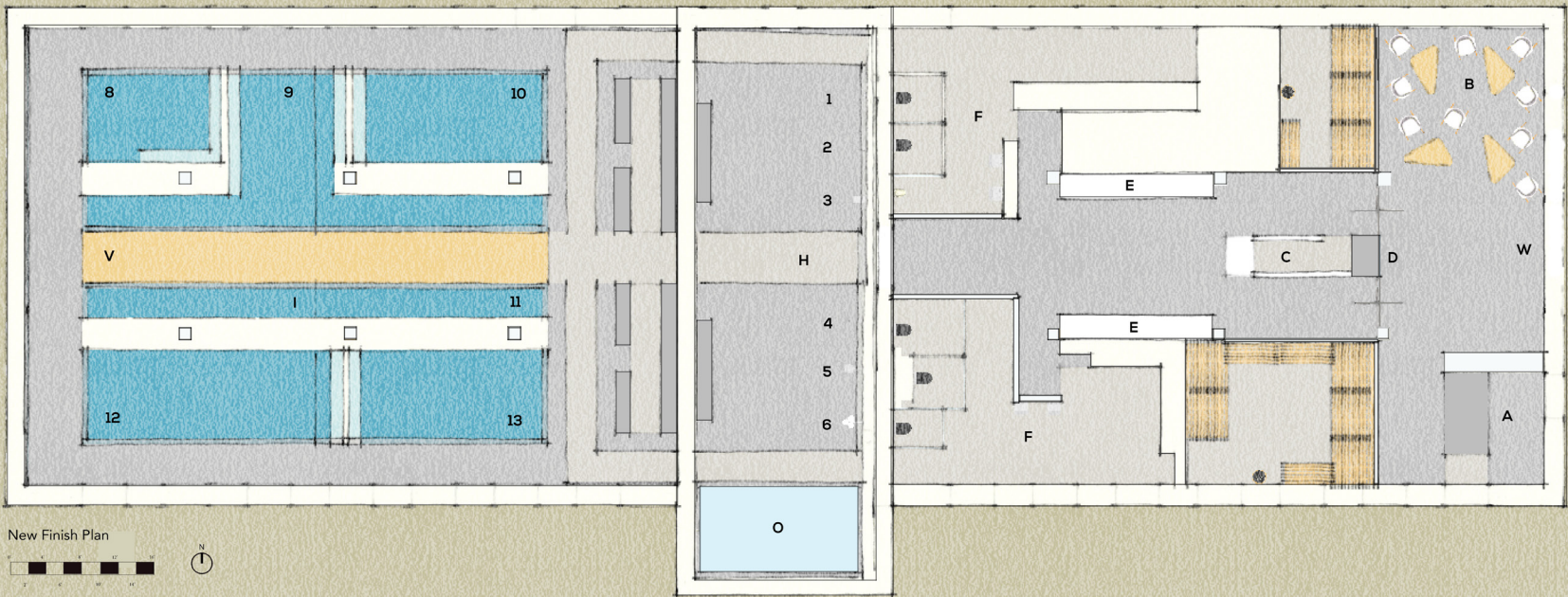
Virginia Soapstone Tile Floor



Cypress Planks



Virginia Soapstone Slab



Toto ADA Urinal



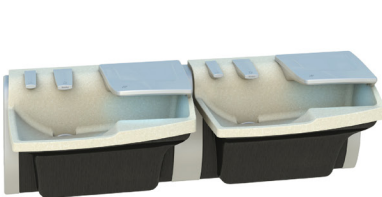
Exnovo LED Pendant Light



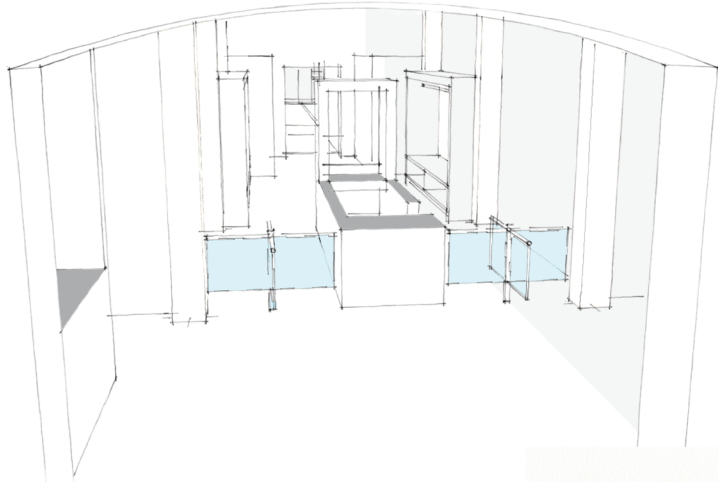
Eames Rocker



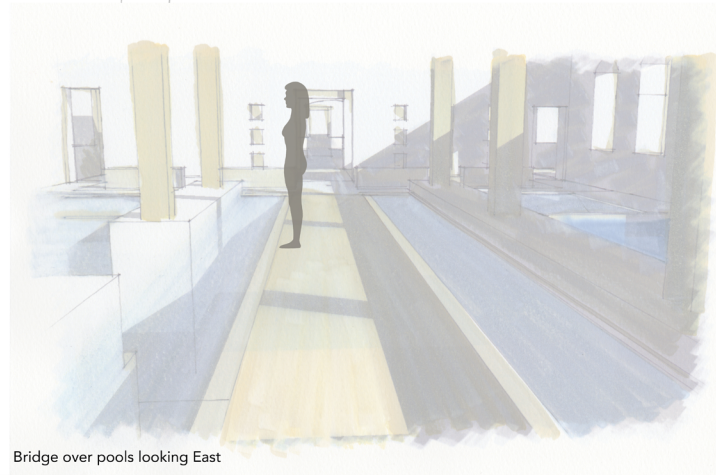
Bradley All-in-One Sink + Dryer



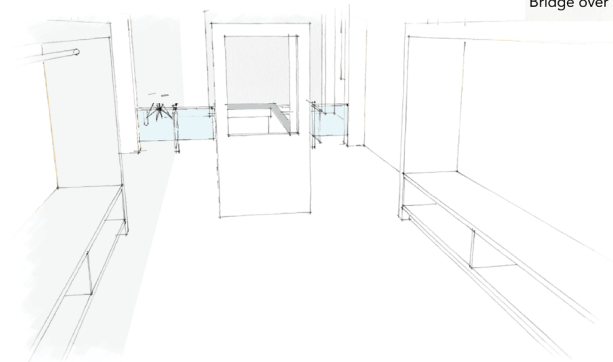
ritual, procession, rebirth



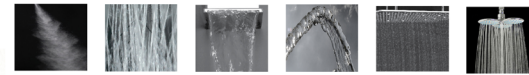
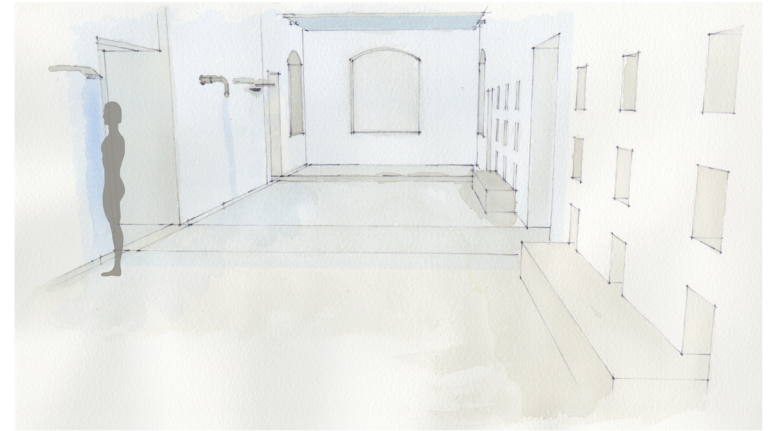
Main entry and turnstiles



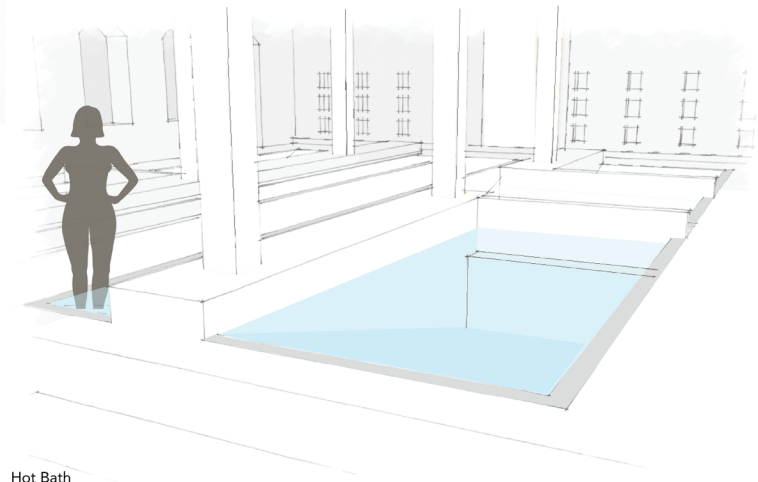
Bridge over pools looking East



Robe wardrobes and back of reception desk

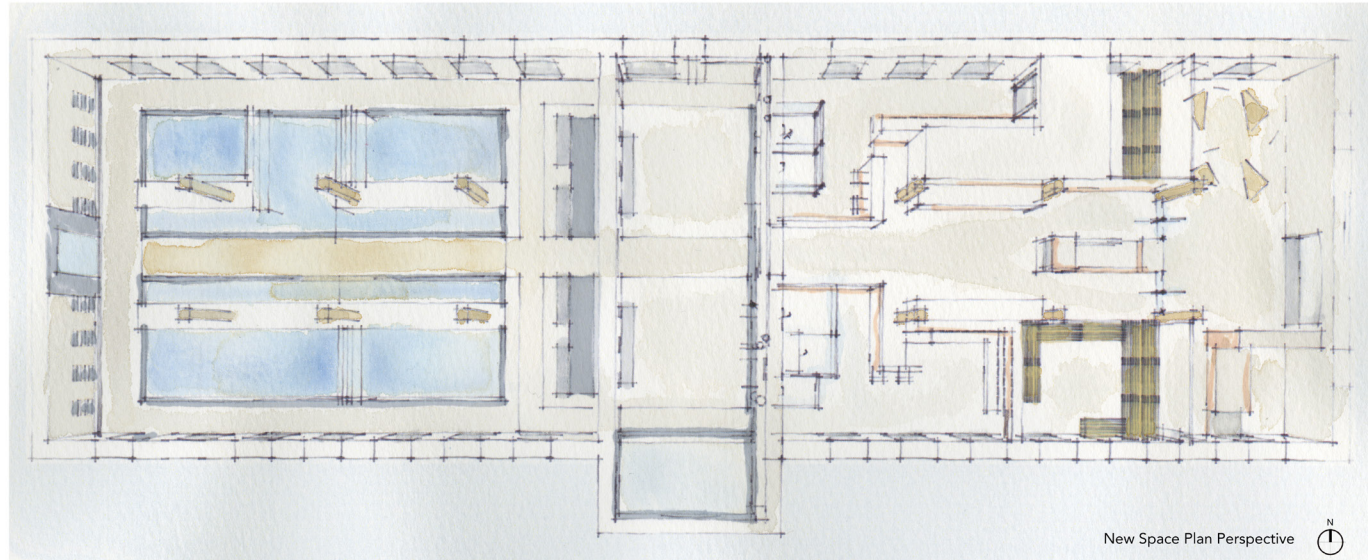


Water Wall: Six kinds of water

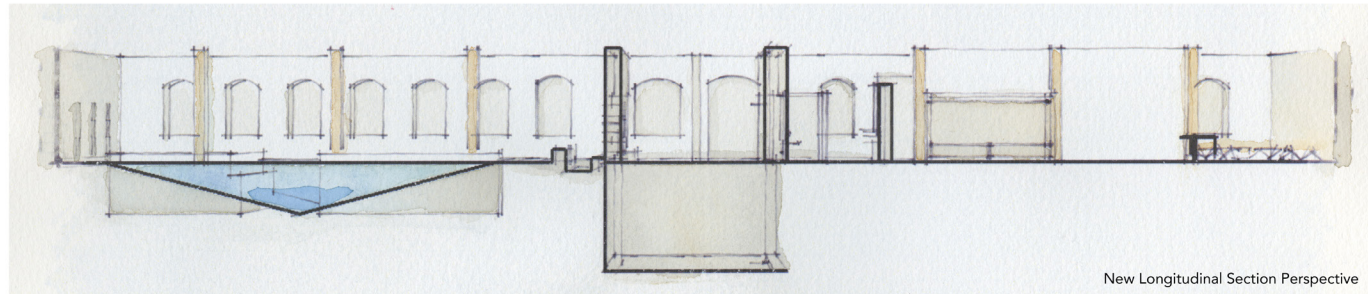


Hot Bath

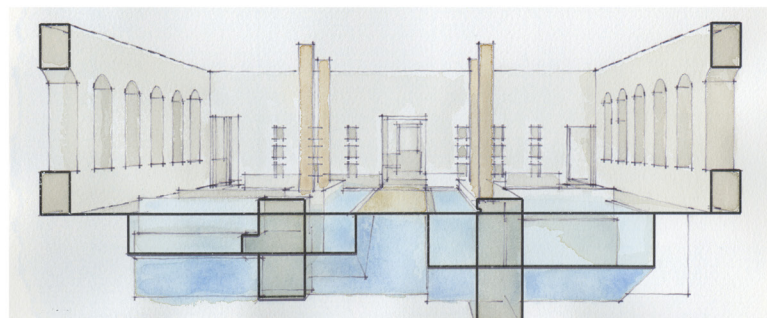
ritual, procession, rebirth



New Space Plan Perspective



New Longitudinal Section Perspective

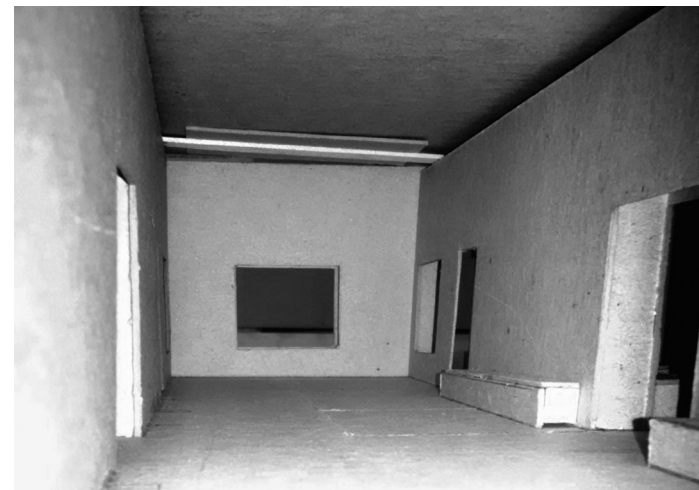
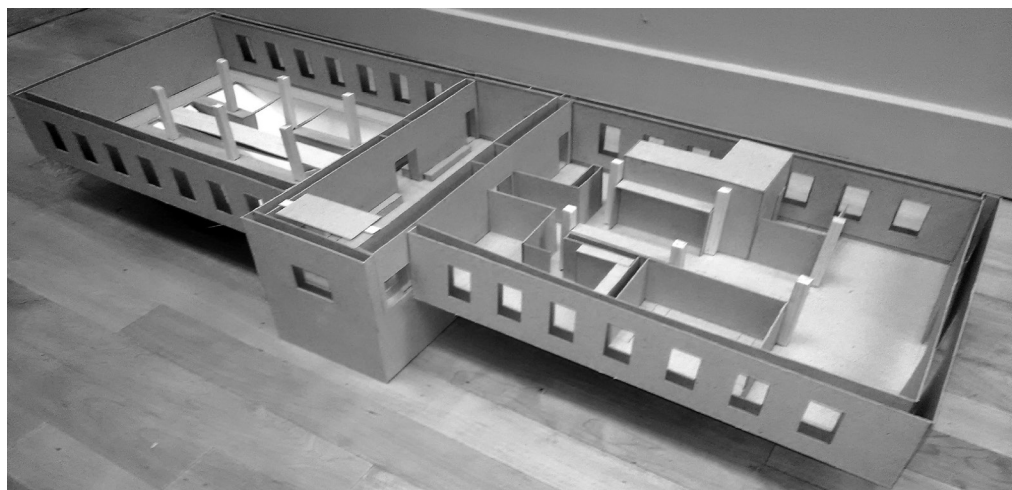
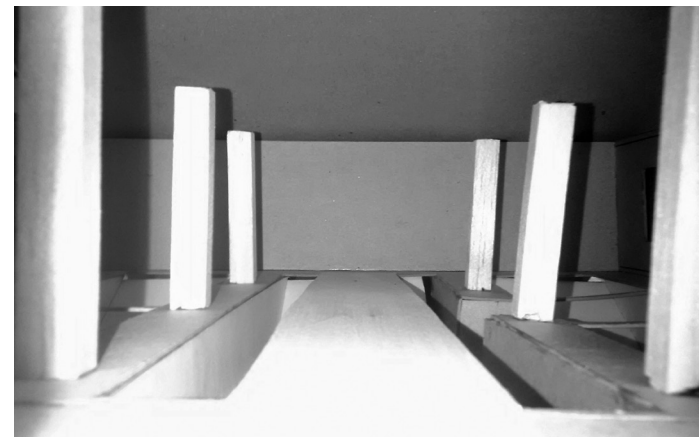
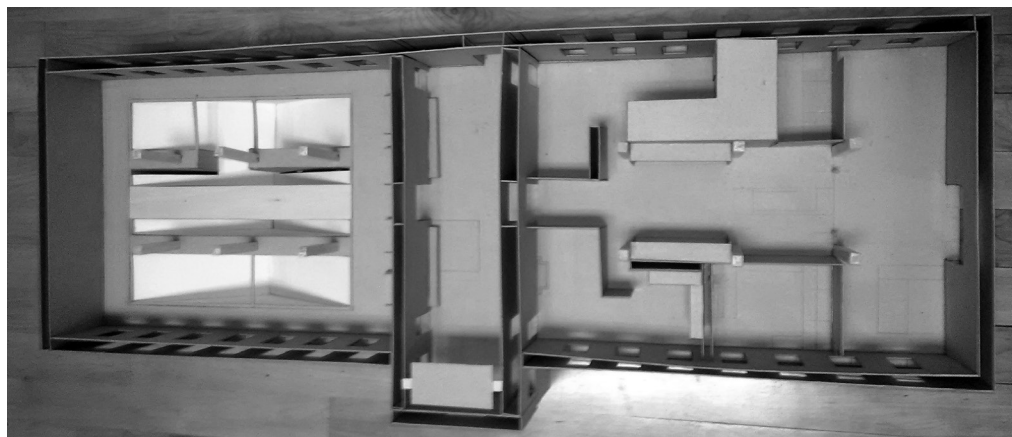


New Short Section Perspective

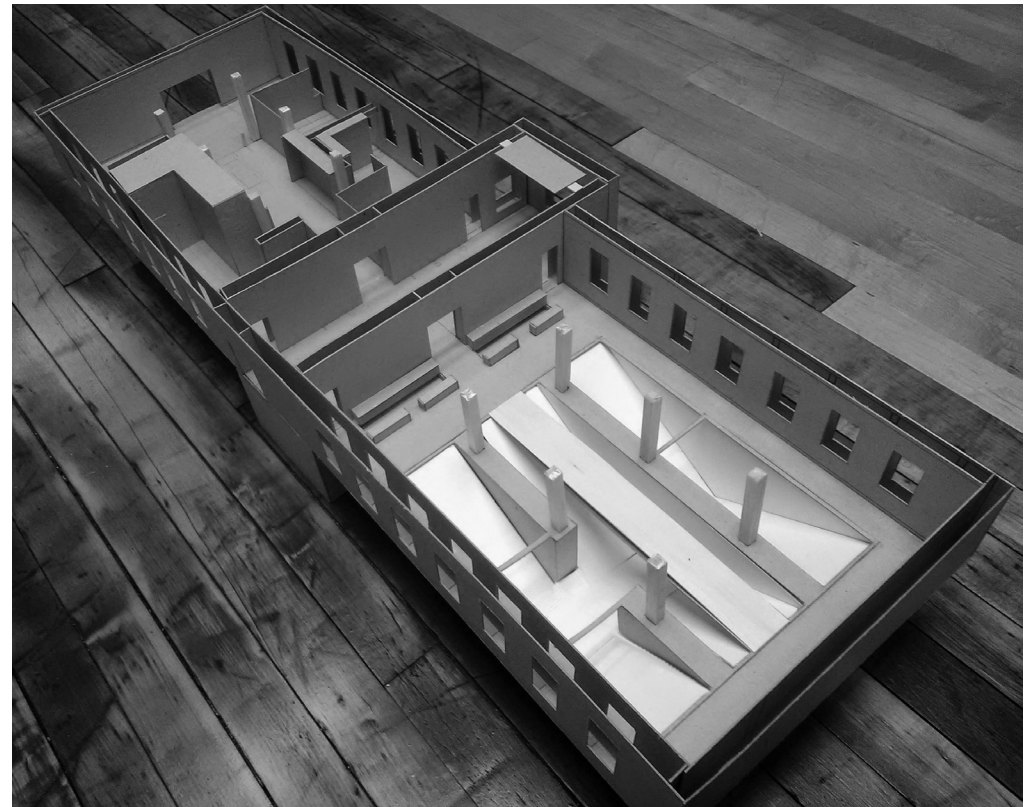
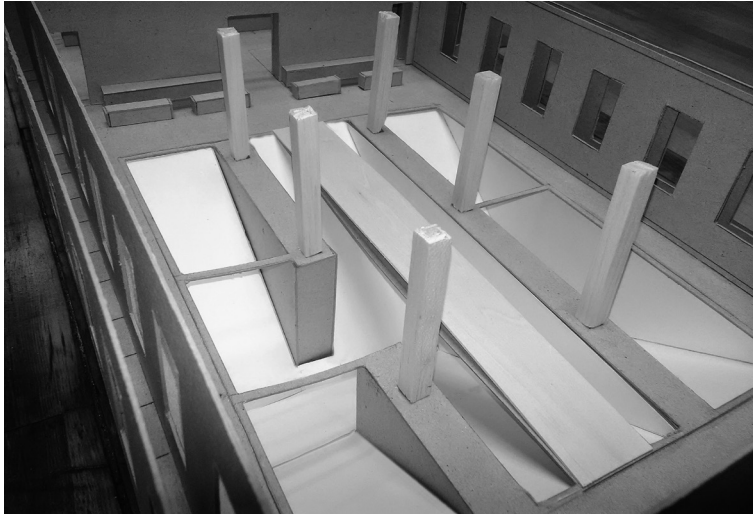
project goals

This project strives to be more than a public bath. The goals of this thesis are to create a space that disarms, a space that dissolves barriers, that simultaneously allows for introspection yet promotes interaction and empathy.

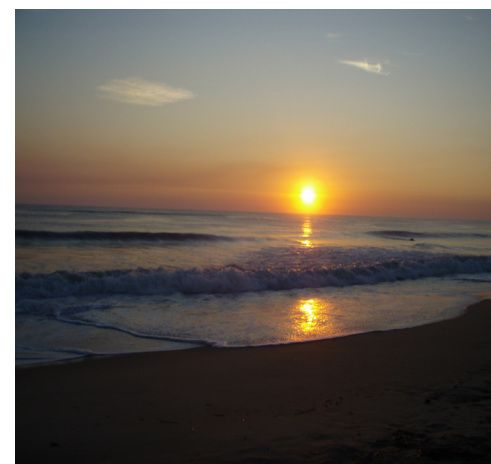
This space will allow for an awakening of the senses, a rejuvenation, an opening of the heart and mind, it must allow for the potential of rebirth.



FINAL MODEL



REFLECTIONS



This thesis was a journey, a reflection, a process, and a discovery. What surprised me was how deeply rooted the connections are between life and water, and the variety of ways humans interact with water on a regular basis. I was also surprised at how vulnerable experiences with water can make people. As I designed the baths, and presented ideas to various people, it became clear how strongly individuals connect to water in both positive and negative ways.

While public baths may have been commonplace in ancient times, the idea of a public bath in today's society has very different connotations. In a world so focused on physical appearance, many people shy away from the idea of interacting with strangers while wearing a bathing suit. This discovery led to the idea of a robe as a security blanket, or personal armor. The robe became a driver in the design of the space. As you enter through turnstiles, you are immediately offered a robe from the linen wardrobes flanking the hall. You then enter the changing rooms and emerge into the shower hall wearing your swimsuit and robe. There are pass-through cubbies in the wall between the showers and the pools to place your robe and have it close at hand. There are similar cubbies along the back wall of the pool room to stow your robe. The hope is that having a robe close at hand will give people a sense of comfort, security, and commonality, leading to more interaction and conversation between strangers.

Designing with water was a challenge. Water became the primary design element, with all other elements acting as vessels, as support for the ritual of bathing. Unlike typical spaces, where walls and ceilings surround you, water envelops you. It not only has a texture and color, but a temperature, a sound, a smell. Water is a powerful element. In water, one can float, wade, swim, sink, dive, plunge, sit, tread, splash... It became vital to my project to allow for all of these experiences.

The baths are meant to be as universally accessible as possible. There are no stairs or raised thresholds. Long channel drains replace shower curbs. Long shallow ramps offer gradual entry into all of the pools. There are benches in each pool to sit, reflect, relax, and converse. Water, ritual, and human interaction are universal experiences, regardless of race, creed, nationality, age, or socioeconomic status. The baths strive to be an equalizer, a space of interaction, conversation, and commonality.

ACKNOWLEDGMENTS



Much gratitude
and love

for too many
family + friends
to name

for your constant
support.

This work is
dedicated to you.

CODE OVERLAY



ITALIANATE Building: R.J. Reynolds Tobacco Co.
320 South 12th Street, Richmond, VA 23219

	Existing Building	Proposed Alteration
IBC Use Group	A-2 Restaurant	A-3 Public Bath
Construction Type	Masonry Ext, Heavy timber frame + columns	Masonry Ext, Heavy timber frame + columns
Number of Stories Above Grade	4 stories w/ 5th fl. Central tower	1st Floor only
Occupancy Load	154 people max	154 people max
Number of Bathrooms + Fixtures	Lavs: 1 / 200 (1), Men's w.c: 1 / 125 (2) ,Women's w.c.: 1 / 65 (3)	Lavs: 1 / 200 (1), Men's w.c: 1 / 125 (2), Women's w.c.: 1 / 65 (3)
Accessibility Requirements	Fully accessible	Fully accessible
Fire Rating of Structural Elements + Assemblies	No Separation Req.	No Separation Req.
Fire suppression system and type	Fully Sprinklered	Fully Sprinklered
Means of Egress, # of Exits	2 stairs, 7 exit doors	1 stair, 4 exit doors
Egress lighting + Location of EXIT signs	EXIT at every exterior door and exit access door	EXIT at every exterior door and exit access door
Elevator, lift, and ramp types + locations	1 elevator located in north central corridor	1 elevator located in north central corridor
Height Limitation	3 Stories, 15,500 SF	3 Stories, 14,000 SF
Floor Area of Renovation	7,730 SF	7,730 SF

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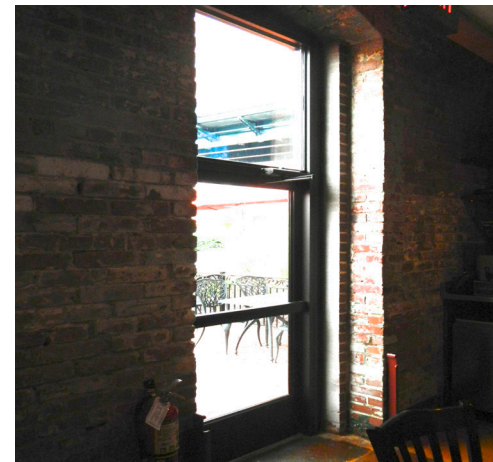
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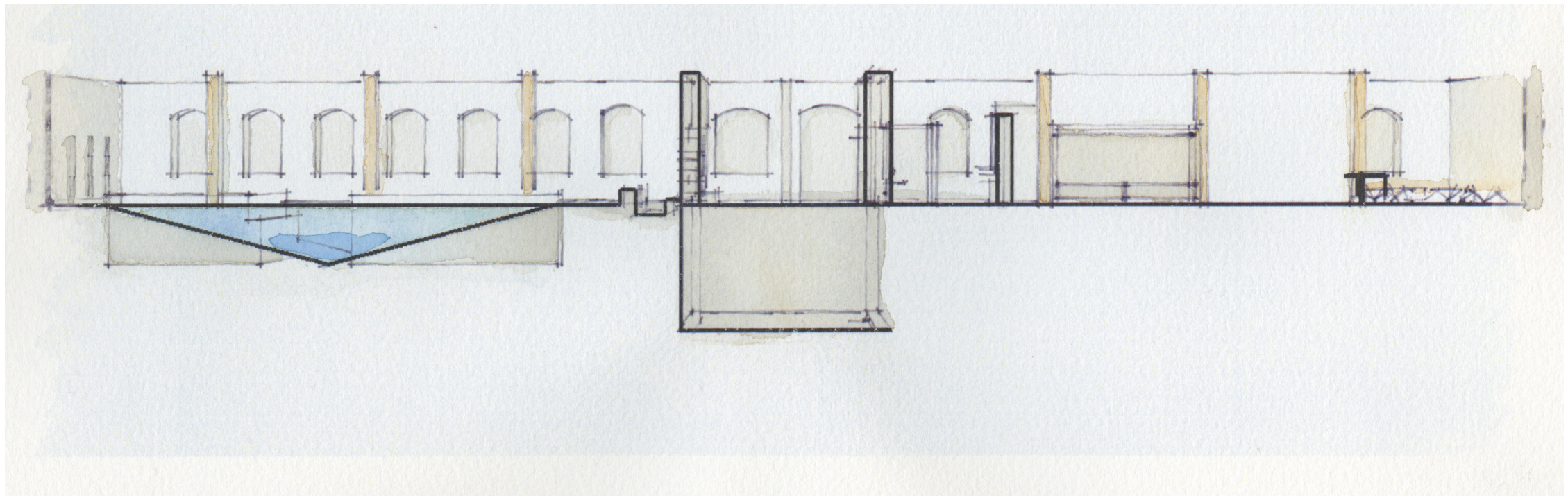
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